

Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460

Office of Admissions



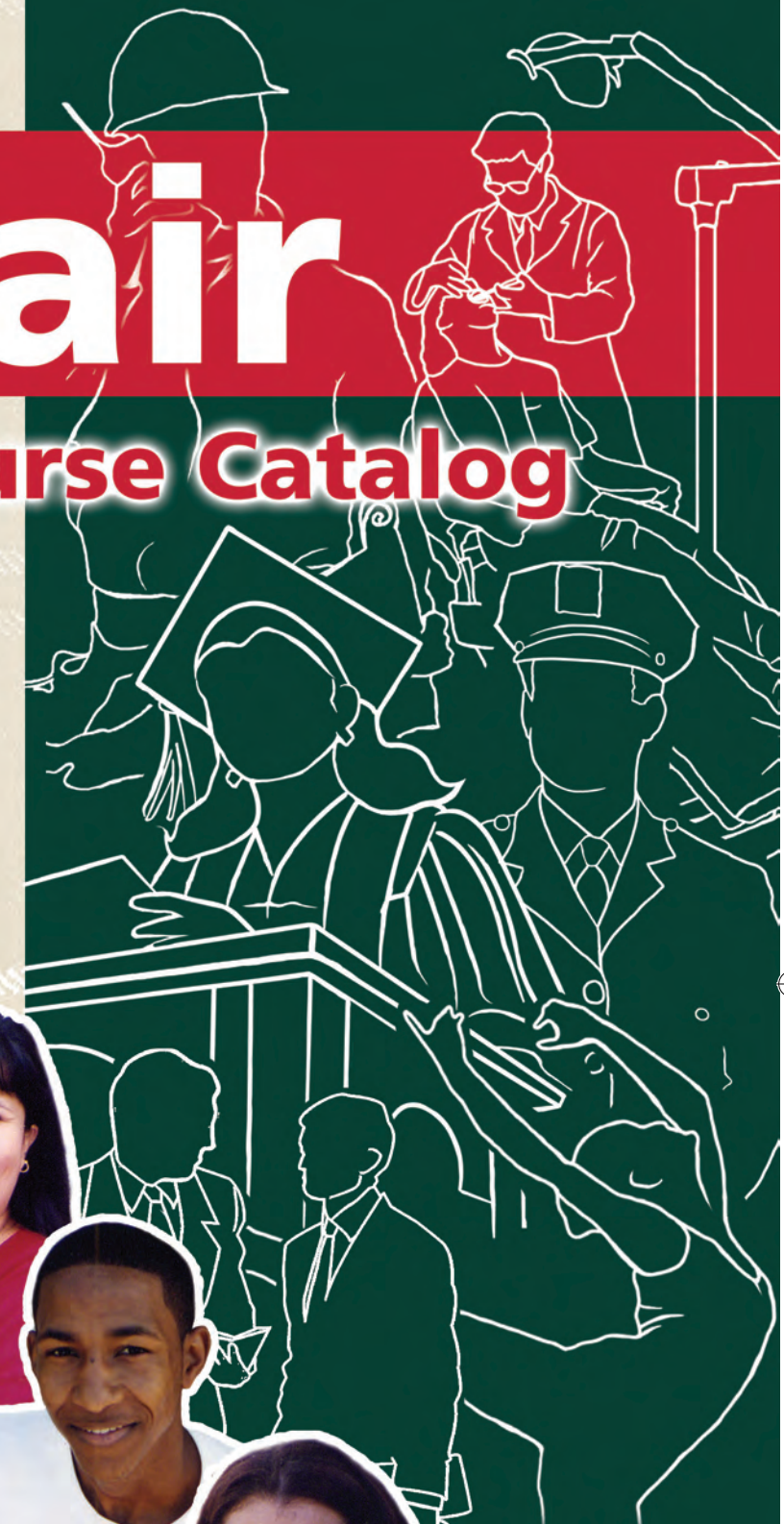
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Sinclair

2006-2007 Course Catalog



Sinclair
Community
College



Getting Around

Main Offices to Complete Enrollment

- **Admissions**
Building 10, Room 10112, (937) 512-3000, 1-800-315-3000 (Ohio), www.sinclair.edu, TDD (937) 512-2187
- **Enrollment Center**
Building 10, Fourth Floor
- **General Enrollment Information**
(937) 512-3000
- **Placement Testing**
Assessment Intake Center, Building 10, Fourth Floor (937) 512-3076
- **Payment of Fees/Bursar**
Building 10, Room 10244, (937) 512-3000
- **Student I.D. Cards**
Registration, Second Floor, Building 10
- **Registration & Student Records**
Building 10, Second Floor, (937) 512-3000, TDD (937) 512-2395
- **Financial Aid & Scholarships**
Building 10, Room 10343, (937) 512-3000

How to Read Room Numbers and Get Around Campus

Buildings 1-7 surround the main plaza with the Library located beneath with access from all seven buildings from the lower level. Building 8 (PAC) is accessible from the lower level as well. Building 9 and 13 can be accessed through the Fifth Street or Lot A parking garage. Campus buildings are not necessarily located in consecutive order.

To get around use underground corridors and enclosed third floor walkways which connect the main buildings. Each of the buildings on campus is numbered. The rooms are numbered according to the building and the level where they are located. Example: Room 10112 means Building 10, Floor 1, Room 12. Floor O or L means the lower levels.

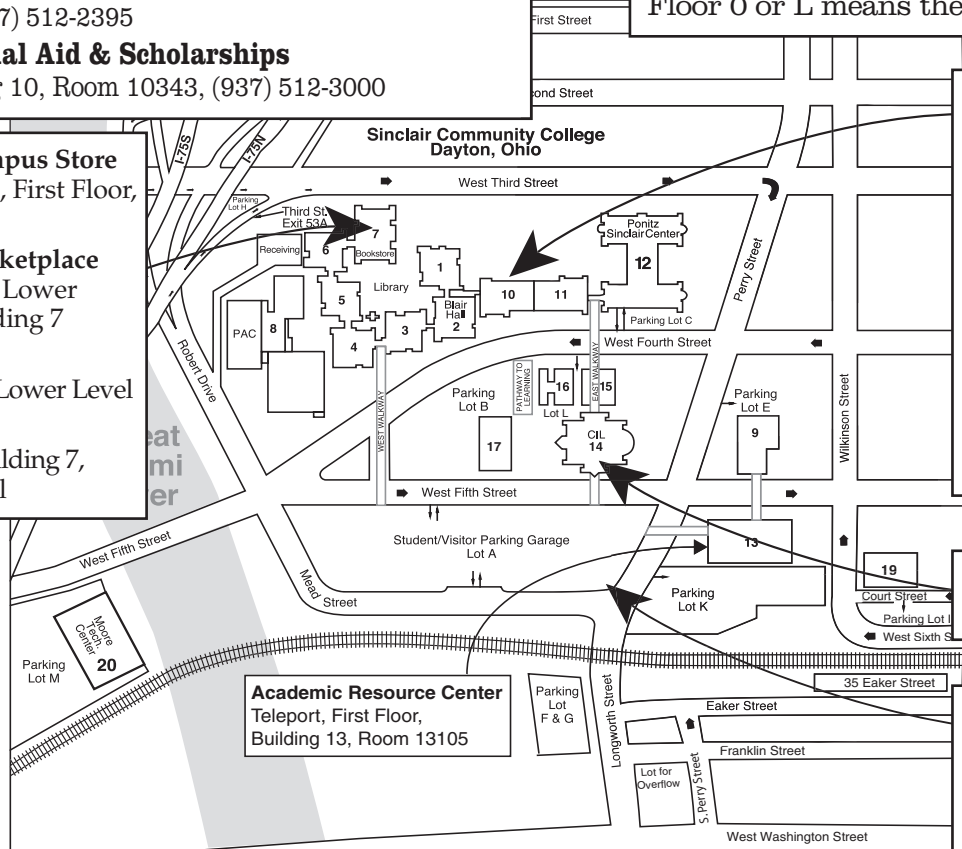
- **Admissions, First Floor, Building 10, Room 10112**
- **Enrollment Center, Building 10, Fourth Floor**
- **Financial Aid, Third Floor, Building 10, Room 10343**
- **Pay Fees, Second Floor, Building 10**
- **Placement Testing, Fourth Floor, Building 10**
- **Registration, Second Floor, Building 10**

- **Orientation, Building 14, Room 14130**

Parking
Get Tartan Card at Registration, put money on card at Bursar, and save!

- **Tartan Campus Store (Bookstore), First Floor, Building 7**
- **Tartan Marketplace (Cafeteria), Lower Level, Building 7**
- **Library, Building 7, Lower Level**
- **Teleport, Library, Building 7, Lower Level**

Academic Resource Center
Teleport, First Floor, Building 13, Room 13105



Room Numbering

Each of the buildings on campus has an identification number. The rooms are numbered according to the building and the level where they are located. Example: Room 10112 means Building 10, Floor 1, Room 12. Floor O or L means the lower levels.

Department/Service Information/Call Center Activity or School Closing Information (24 hours)	Number	Location
	512-3000	Building 10, Room 10112
	(937) 512-2888	
Academic Advising	512-3700	Building 6, First Floor
Admissions	512-3000	Building 10, Room 10112
1-800-315-3000 Ohio		TDD 512-2187
Academic Credit Assessment Information Center	512-2800	Building 6, Room 6142
Academic Resource Center	512-3495	Building 13, Room 13105
Advanced Integrated Manufacturing (AIM) Center	512-5357	Building 13, Room 13101
Allied Health Technologies	512-3029	Building 6, Room 6120
Alumni Affairs	512-2510	Building 15
American Sign Language Laboratory	512-2787	Building 9, Room 9108
Associate of Technical Study/ Associate of Individualized Study	512-2791	Building 3, Room 3142
Athletic & Sports Information	512-2860	Building 8, Room 8025
Blair Hall Theatre	512-2808	Building 2, First Floor
Bookstore/Tartan Campus Store	512-BOOK	Building 7, Room 7110
Bursar/Cashier	512-3000	Building 10, Room 10244
Business Technologies	512-3054	Building 6, Room 6131
Campus Ministry	512-2768	Building 10, Room 10317
Campus Police	512-2700	Building 7, Room 7112
Career Services	512-2772	Building 10, Room 10315
Cashier/Bursar	512-3000	Building 10, Room 10244
Child & Family Education Laboratory	512-2787	Building 9, Room 9108
Child Care/Day Care	512-2234	Building 9, Room 9101
Clarion Newspaper	512-2744	Building 8, Room 8027
College for Seniors (Citizens)	512-5184	Building 10, Room 10424
College Without Walls	512-2791	Building 3, Room 3142
Corporate & Community Services	512-3061	Building 12, Room 12101
Counseling Services	512-2752	Building 10, Room 10324
Credit for Lifelong Learning	512-2800	Building 6, Room 6142
Dental Hygiene Clinic	512-2548	Building 4, Room 4332
Developmental Studies	512-2701	Building 6, Room 6222
Disability Services	512-5113	Building 10, Room 10421
Distance Learning	512-2990	Building 14, Room 14223
Donor Relations	512-2510	Building 15
Educational Support Services	512-5113	Building 10, Room 10421
Engineering & Industrial Technologies	512-2282	Building 6, Room 6130
Englewood Learning Center	836-8750	1150 E. National Road, Englewood
English as a Second Language	512-5113	Building 10, Room 10421
Enrollment Center	512-2210	Building 10, Fourth Floor
Enrichment Center	512-5188	Building 12, Room 12331
Experience Based Education	512-2791	Building 3, Room 3142
Extended Learning & Human Services	512-2760	Building 6, Room 6130
Faculty (Part-time) Support Services	512-2782	Building 16, First Floor
Financial Aid & Scholarships	512-3000	Building 10, Room 10343
Fine & Performing Arts	512-2544	Building 6, Room 6130
First Aid/Police	512-2700	Building 7, Room 7112
Food Service (Aramark)	512-5136	Building 12, Room 12152
Grade Reporting System	512-5454	Building 10, Room 10231
Graduation Application	512-2736	Building 10, Room 10231
Help Desk	512-HELP (4357)	Building 13, Room 13000
Honors/Phi Theta Kappa	512-2517	Building 10, Room 10339
Huber Heights Learning Center	512-3000	7301 Shull Road, Huber Heights
Human Resources	512-2514	Building 7, Room 7340
Learning Center, Miami Valley Research Park	252-9787	1900 Founders Drive
Library	512-2855	Building 7, Lower Level
Liberal Arts & Sciences	512-5134	Building 6, Room 6121

www.sinclair.edu
my.Sinclair.edu

Important Numbers

Department/Service	Number	Location
Lost & Found/Police	512-2700	Building 7, Room 7112
Mathematics Laboratory	512-2286	Building 1, Room 1315
Modern Language Laboratory	512-2228	Building 2, Room 2321
Ombudsman/Student Advocate	512-2205	Building 10, Room 10424
PSEO Program	512-3060	Building 10, Room 10112
Parking Information	512-2397	Garage, Lot A
Part-time Faculty Support Services	512-2782	Building 16
Phi Theta Kappa	512-2517	Building 10, Room 10339
Physical Education & Athletics	512-2860	Building 8, Room 8023
Physics Laboratory	512-5126	Building 4, Room 4241
Police (Campus)	512-2700	Building 7, Room 7112
President of Sinclair	512-2525	Building 7, Room 7311
Prevention Education Resource Center	512-5110	Building 10, Room 10316
Psychology Laboratory	512-2889	Building 4, Room 4212
Public Relations	512-4636 (INFO)	Building 7, Room 7210
Registration & Student Records	512-3000	Building 10, Room 10231
Registration & Student Records Transcript Requests		
Senior Vice President for Information Technology & C.I.O.	512-3107	Building 14, Room 14309
Service Learning	512-2040	Building 6, Room 6141
Sinclair Center	512-3061	Building 12, Room 12101
Sinclair Central Advising	512-2201	Building 10, Room 10424
Sinclair Foundation	512-2510	Building 15
Sinclair Ohio Fellows Leadership Development	512-2509	Building 8, Room 8025
Student Activities Center	512-2509	Building 8, Room 8025
Student Employment	512-2772	Building 10, Room 10315
Student Government Association	512-2509	Building 8, Room 8025
Student Success Planning	512-3032	Building 10, Room 10424
Student Support Services	512-3550	Building 11, Room 11342
Supported Education Program	512-5113	Building 10, Room 10421
Tartan Campus Store	512-2665 (BOOK)	Building 7, Room 7110
Telephone Registration	512-5454	Building 7, Room 7110
Teleport I	512-2002	Library, Building 7, Lower Level
Teleport II	512-5394	Building 13, Room 13223
Testing Center	512-3076	Building 10, Room 10445
Transfer Credit Evaluation	TTY 512-2395	register@sinclair.edu
Tutorial Services	512-2792	Building 10, Room 10444
Upward Bound Program	512-2331	Building 12, Room 12382
Veterans Assistance	512-2586	Building 10, Room 10324
Vice President for Instruction	512-2522	Building 7, Room 7330
Vice President for Work Force Development	512-3061	Building 12, Room 12101
Vice President for Student Services	512-2975	Building 10, Room 10323
Writing Center	512-5106	Library, Building 7, Lower Level
Young Scholars Program	512-3730	Building 12, Room 12331

Web Address www.sinclair.edu

For a quick reference of general information on admissions, financial aid, registration, bursar/cashier

(937) 512-3000 Call Center

For campus telephone numbers and locations, see inside back cover.

Catalog 2006-2007



***Find the need
and endeavor
to meet it.***

— David A. Sinclair,
Founder

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Who's Who on Campus

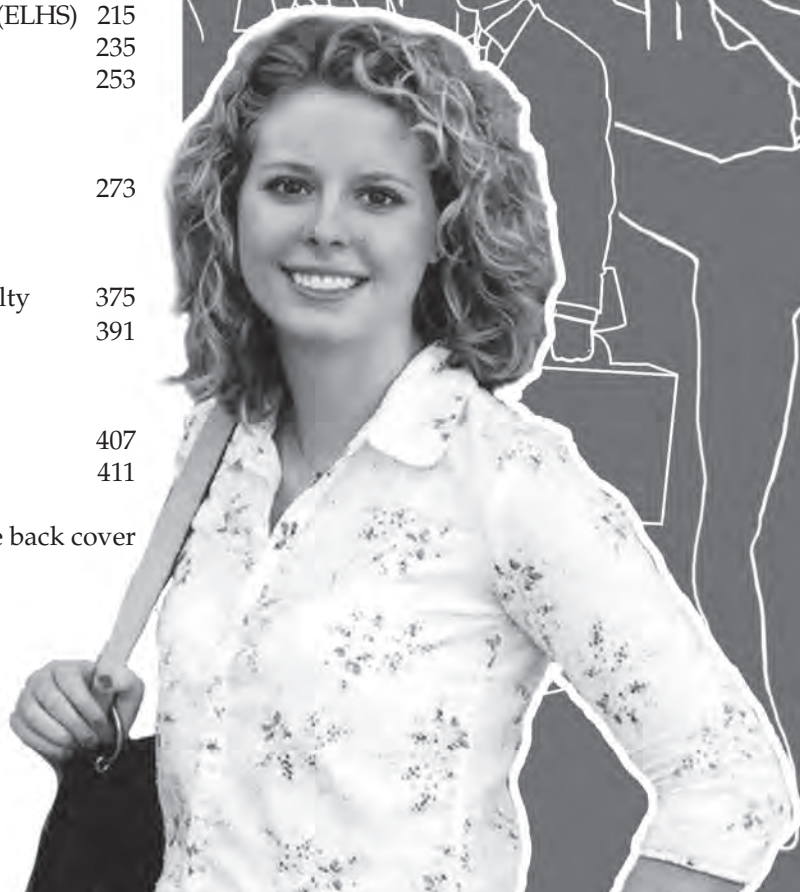
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*"Sinclair is very close
to home and the quality
of classes is very high."*

*—Jessica Cornett
Warren County*



www.sinclair.edu
my.Sinclair.edu

General Information & Policies



Sinclair student Rose Boeckman was recently named to the USA Today 2006 All American Academic First Team. Robert Wells was named to the 10th annual All-Ohio Academic Team.



To Students

Note: This catalog contains official information for the academic years 2006 and 2007. The college reserves the right to appeal, change, or amend rules, regulations, tuition and fees, and may withdraw, add to, or modify the courses and programs listed herein. Students should check the Sinclair Community College web site at my.Sinclair.edu, the official catalog.

To Prospective and Current Students

This catalog has been designed to provide students with most of the information they will need about Sinclair. Students should be aware, however, (1) that the catalog is not intended to be a complete statement of all procedures, policies, rules and regulations, and (2) that the college reserves the right to change without notice any academic or other requirements, course offerings, contents, programs, procedures, rules and regulations, fees, etc., in various publications.

For current information:

- (937) 512-3000
- 1-800-315-3000 (Indiana and Ohio)
- www.sinclair.edu

Non-Discriminatory Practices

Sinclair Community College is strongly committed to a policy of equal opportunity in its employment practices, educational programs and activities, and the many services it offers to the community. The college does not discriminate against applicants, employees or students on the basis of race, color, creed, religion, age, sex, marital status, veteran status, national origin, ancestry, citizenship, or non-disqualifying mental or physical disability.

Students: Inquiries and complaints concerning Title VI (race, color, and national origin), Title IX (sex/gender), or Section 504 (disability) should be referred to the designated coordinator: Senior Vice President, Room 10323, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460, (937) 512-2975.

Faculty and Staff: Inquiries and complaints concerning Title VI (race, color, and national origin), Title IX (sex/gender), or Section 504 (disability) should be referred to the designated coordinator: Ms. Tanya Grant, Human Resources office, Room 7340, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460, (937) 512-2514.

Accreditation

Sinclair is accredited by The Higher Education Learning Commission of the North Central Association, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, (800) 621-7440, (312) 263-0456, FAX (312) 263-7462. Sinclair is also a member of the Ohio Association of Community Colleges. Programs of study are approved by the Ohio Board of Regents. Sinclair is authorized to grant associate degrees in arts, sciences, applied science, and individualized and technical study.

Programs in mechanical engineering technology, quality engineering technology, and electronics engineering technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology. The Automotive Technology program is fully certified by the National Automotive Technicians Education Foundation (NATEF).

All Allied Health Technologies programs and the Paralegal program are fully accredited by national and/or state approved accrediting organizations. Business accreditation is by the Association of Collegiate Business Schools and Programs. Pre-kindergarten Teacher Certification is fully accredited by the Ohio Department of Education, Teacher Certification Office.

Sinclair's Art, Visual Communications, Interior Design programs are accredited by the National Association of Schools of Art and Design (NASAD) and the Music program is accredited by the National Association of Schools of Music (NASM).

Right to Know

The U.S. Department of Education requires that all colleges and universities report graduation rates to all prospective and current students.

As of the fall 2004 of the 1,578 first-time, full-time, degree seeking students who entered Sinclair in the fall 2001, 74.5% had graduated, were still enrolled at Sinclair, had transferred to another college or university, or left Sinclair in good standing.

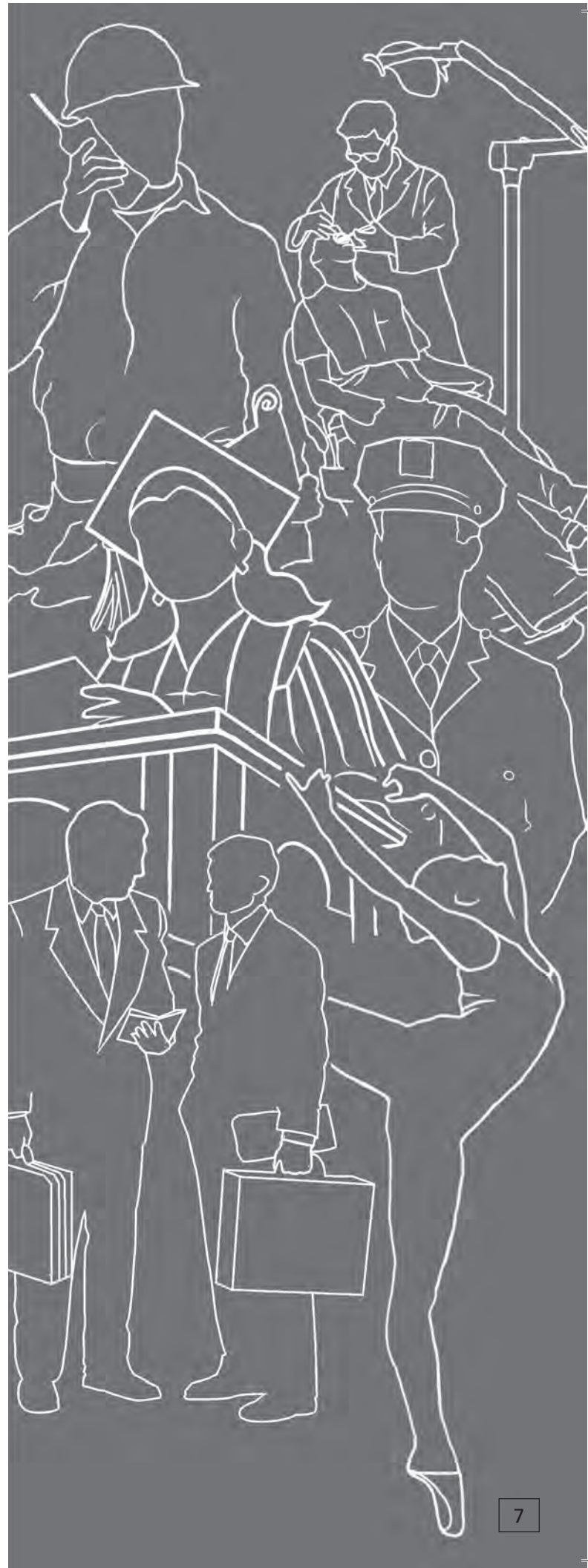
Outcome

143	graduated within 3 years	9.1%
289	transferred by fall 2004	18.3%
289	enrolled at Sinclair fall 2004	18.3%
455	left Sinclair in good standing*	28.8%

* Includes only those who had not graduated or transferred and were not enrolled here as of fall 2004.

Jeanne Clery Act (Campus Security Act of 1990)

The federal Jeanne Clery Disclosure of the Campus Security Policy and Crime Statistics Act requires Sinclair Community College annual security report to include statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings owned or controlled by Sinclair Community College; and on public property within, or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus safety, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. The public may obtain a printed copy by contacting the college's Campus Police department at (937) 512-2700 or by accessing the following web site: www.sinclair.edu/departments/police.



www.sinclair.edu
my.Sinclair.edu

Welcome to Sinclair

Sinclair...a great place to begin or continue your education.

Welcome to Sinclair Community College!

By choosing Sinclair, you have chosen to pursue higher education provided by caring, award-winning faculty and staff in a state-of-the-art environment at the lowest cost available in Ohio. Sinclair is a board member college of the League for Innovation in the Community College, putting it in company with only 20 other community colleges and ranking it in the top two-percent of the nation's more than 1,200 two-year colleges.

Make the best of your time at Sinclair. Immerse yourself, not only in your studies but also in all the student activities and cultural amenities that make Sinclair a great place to begin or continue your education.

And thanks for choosing Sinclair Community College!



**Sinclair:
Success
Starts
Here**

Strong Roots and Positive Growth

College founder, David A. Sinclair, firmly believed that everyone deserves to further their education, and the Dayton community supported that belief. Through such strong faith and support, Sinclair Community College has grown from humble beginnings to earn a place as one of the finest colleges of its kind in the country.

Sinclair's roots go back to 1887, the year our Dayton YMCA began offering arithmetic, free hand and mechanical drawing classes in a one-room evening school. In 1910, the "Y" began offering courses in business administration. By the 1930s, offerings included a school of Liberal Arts, the Dayton YMCA Office Training School, Dayton Technical School and the Dayton Law School.

In 1948, the YMCA College became Sinclair College, renamed in honor of David A. Sinclair, general secretary of the Dayton YMCA (1874-1902) and founder of its educational program. By 1959 the college was independently operated and separately incorporated as a non-profit institution of higher learning under the laws of the State of Ohio. The State Board of Education authorized Sinclair to continue to conduct a junior college program and confer associate degrees in arts and sciences.

Sinclair's impressive growth was once again recognized when the Montgomery County Commissioners created the Montgomery County Community College district in 1965. A month later, they appointed a nine-member board of trustees. Downtown land, 20 acres in all, was acquired for the new campus.

The official plan for the community college was approved and its charter was presented in 1966. Voters of Montgomery County passed a one-mill levy for 10 years to support the proposed Montgomery County Community College District. This vote of confidence among our community members would be repeated and enlarged during the coming years.

Edward Durell Stone of New York, and Sullivan, Lecklider and Jay of Dayton were named architects for the new Sinclair campus, which opened its doors to students in September 1972. In 1989, Sinclair was selected for membership in the prestigious League for Innovation in the Community College.

A major addition to the campus occurred in 1989 with the opening of the 200,000 square foot David H. Ponitz Sinclair Center. It houses the Corporate & Community Services division of the college.

In 1993, the Advanced Integrated Manufacturing (AIM) Center, a joint program of Sinclair and the University of Dayton, began with the opening of Building 13. In 1997, Sinclair was re-accredited by the North Central Association of Colleges and Schools and Dr. David H. Ponitz, Sinclair president for 22 years, retired. Dr. Ned J. Sifferlen was appointed as the fourth president by the Board of Trustees. During 1998, both the Center for Interactive Learning (CIL) and the Automotive Technology/Environmental Technologies facility, Building 20, opened. In 2000, Sinclair was chosen as one of only 12 Vanguard Learning Colleges in North America.

In fall 2003, Dr. Steven L. Johnson succeeded Dr. Ned Sifferlen as the college's fifth president. Under his leadership, the college continues to explore ways of reaching out to even more of the underserved students of the region.

Governance

In 1966, when Sinclair moved from private to public status, Montgomery County Commissioners and Ohio's Governor appointed a nine-member Board of Trustees to conduct the college's affairs. As the policy making body for the college, the board approves plans and internal policy decisions made by the president, administrative officers and faculty.

Financial Resources

Operated by the Montgomery County Community College District, Sinclair was established by the voters of the county. Revenues are derived from tax levies approved by the voters of Montgomery County, the State of Ohio, and fees paid by students. Capital funds are received from state and federal grants and appropriations. The Sinclair Foundation raises funds from individuals, organizations and corporations to support scholarships and special educational projects.

Sinclair Foundation

The Sinclair Community College Foundation was established in 1969 to fulfill an ongoing need for student scholarships. The foundation is also a significant source of support for innovative concepts and educational enrichment opportunities when regular college funding is not available.

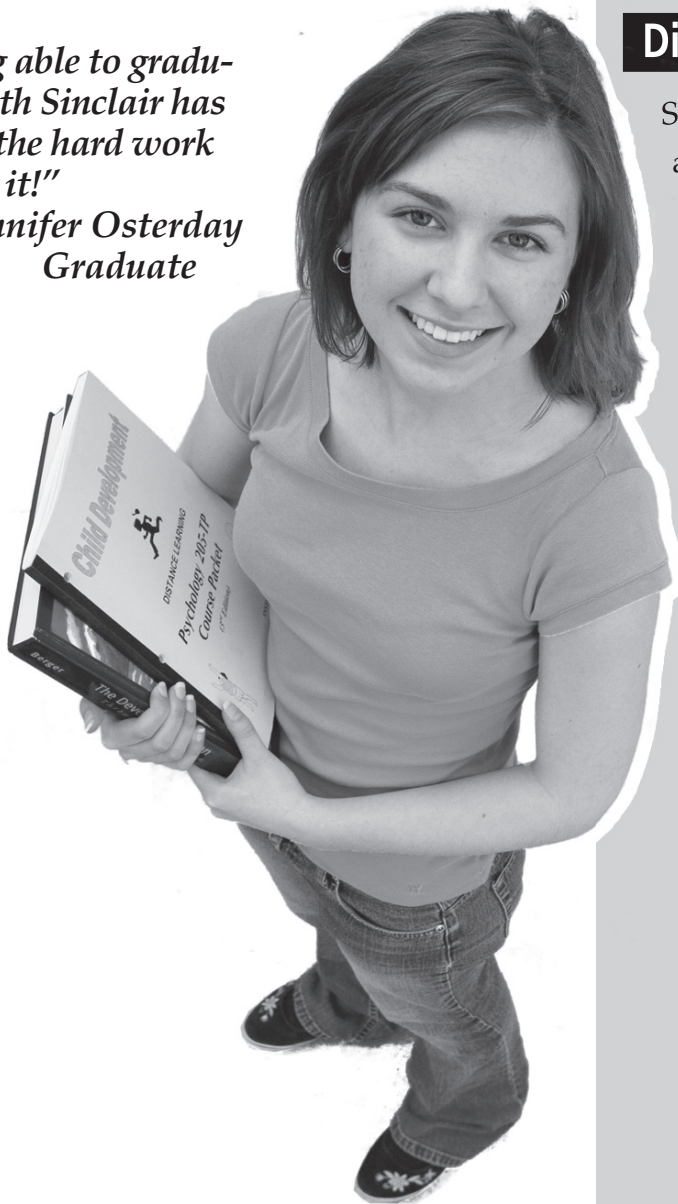
The Sinclair Foundation is a separate 501 (c)³ tax-exempt entity that accepts gifts of cash, bequests, trusts, annuities, securities, insurance and real estate.

www.sinclair.edu
my.Sinclair.edu

Vision and Mission

“Being able to graduate with Sinclair has made the hard work worth it!”

*—Jennifer Osterday
Graduate*



Vision

Your Bridge to the Future

Before us lie uncharted worlds of opportunity. Sinclair will be the bridge into that future, giving open access to opportunity, intellectual challenge, and self-discovery for students with diverse needs.

Mission

We help individuals turn dreams into achievable goals through accessible, high quality, affordable learning opportunities.

Diversity Vision & Mission

Sinclair Community College strives to create an inclusive environment in which all people are valued and supported. The goal within this environment is to recognize and acknowledge our similarities; to understand and respect our differences; and to prepare ourselves and our students to live, learn, and work together in a global community.

Evidence of Excellence

National 2005 Outstanding Community College Professor of the Year

Dr. Katherine Rowell

Professor, Sociology, Sinclair Community College

Named by the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education (CASE).



Sinclair salutes Dr. Katherine Rowell and the 1,100 outstanding Sinclair full- and part-time faculty serving the Greater Dayton community.

NISOD

Sinclair's excellence in teaching was recognized by the 2006 National Institute for Staff and Organizational Development (NISOD) Awards for Teaching Excellence. This award was given to six faculty members, one from each of the academic divisions.



Barbara Wallace
Professor, Chairperson
Health Information Management



Anitra Terrell
Assistant Professor
Marketing



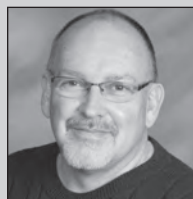
James Houdeshell
Professor
Quality Engineering Technology



Helen McCann
Professor
Child & Family Education



Gina Neuerer
Assistant Professor
Theatre & Dance



Gary L. Mitchner
Professor, Chairperson
English Department

Academic Calendar

Fall Quarter

2006-2007

New Faculty Orientation
 Fall Conference
 Labor Day
 Faculty Learning Day
 Full Session & First Five-Week (A Term) Classes Begin
 First Five-Week (A Term) Session Ends
 Second Five Weeks (B Term) Session Begins
 Veterans Day Holiday
 Full Session and Fall B Term Classes End

August 29 and 30
 September 1 (Fri.)
 September 4 (Mon.)
 September 5 (Tues.)
 September 6 (Wed.)
 October 9 (Mon.)
 October 19 (Thurs.)
 November 10-11 (Fri., Sat.)
 November 22
 (Wed. - any classes beginning after 4:00 p.m. will not meet)
 November 23-26 (Thurs.-Sun.)
 December 20, 2006 (Wed.)
 December 21-27 (Thurs-Wed.)
 January 1 (Mon.)

Thanksgiving Holiday
 Employee Learning Day; Campus Closed*
 Winter Holiday
 New Year's Day Holiday

Mini Term

A & B Classes Begin
 A Classes End
 B Classes End

November 27 (Mon.)
 December 8 (Fri.)
 December 15 (Fri.)

Winter Quarter

Full Session & First Five-Week (A Term) Classes Begin
 First Five-Week (A Term) Session Ends
 Second Five-Week (B Term) Session Begins
 Martin Luther King, Jr., Holiday
 Full Session & Second Five-Week (B Term) Classes End

January 2 (Tues.)
 February 5 (Mon.)
 February 12 (Mon.)
 January 15 (Mon.)
 March 18 (Sun.)

Spring Quarter

Full Session & First Five-Week (A Term) Classes Begin
 First Five-Week (A Term) Session Ends
 Second Five-Week (B Term) Session Begins
 Memorial Day Holiday
 Commencement
 Classes End

March 26 (Mon.)
 April 29 (Sun.)
 May 7 (Mon.)
 May 28 (Mon.)
 June 8 (Fri. - 7:00 p.m.)
 June 10 (Sun.)

Summer Quarter

Classes Begin
 First Five-Week Term
 Seven-Week Term
 Ten-Week Term
 Second Five-Week Term
 Independence Day Holiday
 Classes End
 First Five-Week Term
 Seven-Week Term
 Ten-Week Term
 Second Five-Week Term

June 11 (Mon.)
 June 11 (Mon.)
 June 11 (Mon.)
 July 16 (Mon.)
 July 4 (Wed.)
 July 15 (Sun.)
 July 29 (Sun.)
 August 19 (Sun.)
 August 19 (Sun.)

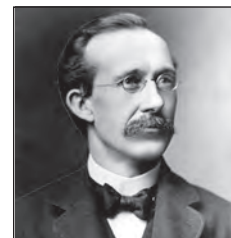
Note: The college reserves the right to make changes to the published schedule.
 * Employee Learning Day (campus and all offices closed)



Sinclair prepared me very well to succeed in today's Allied Health job market. The curriculum was up-to-date, classes were scheduled to fit my schedule, and the tuition was totally affordable. I didn't have to start off incurring a lot of college debt. I recommend Sinclair to everyone I know.

—Emir Stewart
Sinclair Graduate

Sinclair at a Glance



"Find the need and endeavor to meet it," was David A. Sinclair's goal when building the basis for the Sinclair of today.

Accomplishments

Named one of 12 Vanguard Learning Colleges in the nation; an active board member college in the League for Innovation in the Community College and recognized as having the lowest tuition of any two or four year college/university in the state of Ohio. Thirteen Sinclair students named to the All-USA Academic Team for community and junior colleges.

Academic Year

Quarter system: Fall, Winter, Spring and Summer.

Enrollment (Fall 2005)

22,555 headcount with full-time equivalent enrollment at 12,183

- 41% men
- 59% women
- 35% full-time students
- 65% part-time students
- 21% new students
- 52% continuing students
- 20% returning/former students
- 5% transfer students
- 2% transient students

Residency Status (Fall 2005)

Montgomery County	68%
Other Ohio County	30%
Out-of-State & International	2%

Ethnicity (Fall 2005)

Caucasian	71.9%
Total Minority:	21%
African-American/Black	16.5%
Hispanic	1.3%
Asian/Pacific Island	1.6%
International	.8%
Native American/AK	.4%
Unknown	7.5%

Enrollment Patterns (Fall 2004)

Day students	69%
Evening students	29%
Weekend students	3%
Student-Faculty Ratio	19:1

Age Distribution (Fall 2005)

Under 17	1%
17-19 years	17%
20-29 years	42%
30-39 years	15%
40-49 years	10%
50-72 years	10%
Over 72	5%

*Average age 31

Financial Assistance (Fall 2005)

\$54 million was awarded to approximately 47% of the students registered and eligible to receive various types of financial assistance (grants, loans, work study, scholarships, loans, employer tuition assistance, and third parties).

Degrees Granted

Associate degrees in arts, sciences, applied science and individualized and technical study.

A.A.	Associate of Arts
A.A.S.	Associate of Applied Science
A.S.	Associate of Science
A.T.S.	Associate of Technical Study
A.I.S.	Associate of Individualized Study

Campus Safety

Sinclair Campus Police department has 21 sworn police of officers, 70 part-time security of officers and 10 student security of officers. This provides visible police presence to prevent crime.

Organizations & Clubs

The college encourages participation in the co-curricular life of Sinclair as another way of learning. If students are interested in joining one or more of the clubs or organizations listed in the college catalog, they should stop by the office of Student Activities/Student Government, Sinclair Center, Building 8.

Founded

1887 as part of the "Dayton YMCA;" became "Sinclair College" in 1948 and "Sinclair Community College" in 1966; relocated to current main campus in 1972.

Location

Dayton, Ohio, western edge of downtown Dayton, adjacent to Interstate 75.

Campus

62+ acres of land with 20 buildings sitting amidst a blend of modern architecture and green space. Also, 42 off-campus locations throughout Montgomery and surrounding counties.

Accreditation

North Central Association of Colleges and Schools (and a member of the Ohio Association of Community Colleges).

Governance

Eleven-member Board of Trustees; six appointed by Montgomery County Commissioners, four appointed by Ohio's Governor, one by Warren County Commissioners.

Financial Resources

Revenues derived from a 2.5 mill, 10-year tax levy approved in 1998 by Montgomery County voters and fees paid by students. Operating and capital funds are received from state subsidy and federal grants and appropriations.

www.sinclair.edu
my.Sinclair.edu

How to Begin

It's Easy to get Started at Sinclair!

- 1 Complete the Application for Admission
- 2 Find your student type
- 3 Follow the easy steps to enrollment

Admission to Sinclair is open to all applicants except international students on an F-1 visa. A one-time, non-refundable \$20 application fee will be assessed at the time of your initial registration for classes. There are five new student types.



I always thought I would return and complete my degree someday. I am very proud.
—Misty Strawser
Graduate

Open Admission

Admission is open to all applicants, with the exception of international students on an F-1 visa. Some academic programs have additional requirements that must be completed prior to actually beginning the program. These include all of the Allied Health programs, Paralegal, Police Academy, Early Childhood Education, ASEP, CAP, Honda PACT, and the A.I.S. and A.T.S. degrees.

Applicants to Sinclair can apply online at www.sinclair.edu/applynow or in person at the Enrollment Center, Building 10, Fourth Floor. A one-time, non-refundable \$20 application fee will be assessed at the time of the student's initial registration for classes.

Those who would like information about Sinclair Community College, the academic programs or would like to schedule a tour of the campus, contact Admissions, (937) 512-3000.

Monday-Thursday	8:00 a.m.-7:00 p.m.
Friday	8:00 a.m.-5:00 p.m. (4:30 in the summer)
Saturday	9:00 a.m.-12:00 noon (Closed in the summer)

Those who are ready to begin should go to the enrollment center.

New Student Enrollment Center

Building 10, Room 10422, (937) 512-3000

The New Student Enrollment Center is the starting place for all **new students** ready to begin at Sinclair. Students who are new to college, transferring from another institution, or just coming to pick up a couple classes will find helpful staff ready to assist them. Services include: Assistance with Sinclair's Admission Application, preparation for placement testing, registration, making an appointment for New Student Orientation / Academic Advising and other needed services and referrals.

Hours: Monday-Thursday, 8:00 a.m.-7:00 p.m.
Friday, 8:00 a.m.-4:00 p.m.
Summer hours vary.

Enrollment

Begin by finding your new student type and follow the steps in the order listed:

HOW TO BEGIN

First Time College Student

Seeking a degree or certification from Sinclair Community College

Seeking to enroll at Sinclair after high school graduation or completing a GED, or adults with no prior college classes and planning on earning a degree or certificate at Sinclair or another college/university.

Step

- 1 **Apply to Sinclair by completing an Application for Admission** in one of these three ways. Students will receive acceptance letters within one week.
 - Submit application online at www.sinclair.edu; or
 - Mail application to the address provided on the application; or
 - Submit the paper application in person to the New Student Enrollment Center, Building 10, Fourth Floor lobby
- 2 **Complete Placement Testing.** Go to the New Student Enrollment Center, Building 10, Fourth Floor lobby. Math, reading, and writing assessments are used for course placement only. Picture I.D. required for placement testing.
- 3 **Attend New Student Orientation.** Staff at the Enrollment Center will schedule students for this mandatory information session.
- 4 **Meet with an Academic Advisor** or other counselor as assigned. The advisor will help select appropriate courses based on the students' educational goals and placement test results. Academic advisors are located in Building 6, First Floor. Call (937) 512-3700.
- 5 **Develop a Class Schedule.** Access Sinclair's online student system Web Advisor at my.Sinclair.edu to view course availability. On campus, staff at Sinclair Central, Building 10, Second Floor, will help students schedule days, times and sections of their courses and show how to access online registration. For questions, call (937) 512-3000, or 1-800-315-3000.
- 6 **Register for Classes** in one of these three ways:
 - Online at my.Sinclair.edu by clicking on the Web Advisor tab, select "Student" and then "Register"
 - Telephone (T-Reg) by calling (937) 512-5454 or 1-866-512-5454
 - In person at Registration & Student Records in Building 10, Second Floor
- 7 **Obtain a Tartan Card (Student I.D.)** from Registration & Student Records in Building 10, Second Floor, after submitting the initial course registration. (Englewood, Huber Heights students: see the site coordinator).
- 8 **Pay for Classes** by the quarterly deadline in one of these five ways:
 - **Online** at <http://my.Sinclair.edu> (click on the Web Advisor tab, then "Student," then "Finances" and finally, "Pay Now"): Visa or MasterCard only
 - **Telephone** (T-Reg) by calling (937) 512-5454 or 1-866-512-5454: Visa or MasterCard only
 - **In person** at the Bursar's (Cashier's) office in Building 10, Second Floor
 - **Mail** to Bursar's (Cashier's) office, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460
 - **FACTS Tuition Payment Plan** (facts.sinclair.edu)

Go to the New Student Enrollment Center for assistance and questions, Building 10, Fourth Floor lobby.

Incoming Transfer Student

Seeking a degree or certificate at Sinclair Community College

Attended another college or university and is seeking a degree or certificate at Sinclair.

Step

- 1 **Apply to Sinclair by completing an Application for Admission** in one of these three ways. Students will receive acceptance letters within one week.
 - Submit application online at www.sinclair.edu
 - Mail application to the address provided on the application
 - Submit the paper application in person to the Enrollment Center, Building 10, Fourth Floor lobby
- 2 **Submit Transcripts.** Have the issuing institution mail the students' "official" transcripts to **Sinclair Community College, Registration & Student Records, 444 West Third Street, Dayton, Ohio 45402-1460**. Students can bring a copy of their "unofficial transcript" or grade reports for academic advising purposes only.
- 3 **Attend New Student Orientation.** Staff at the Enrollment Center will schedule students for this information session.
- 4 **Meet with an Academic Advisor.** The students' advisors will help select appropriate courses based on educational goals. Academic advisors are located in Building 6, First Floor. Call (937) 512-3700.
- 5 **Develop a Class Schedule.** Access Sinclair's online student system Web Advisor at my.Sinclair.edu to view course availability. On campus, staff at Sinclair Central, Building 10, Second Floor, will help schedule days, times and sections of courses and show how to access online registration. For questions, call (937) 512-3000, or 1-800-315-3000.
- 6 **Register for Classes** in one of these three ways:
 - Online at my.Sinclair.edu by clicking on the Web Advisor tab, select "Student" and then "Register"
 - Telephone (T-Reg) by calling (937) 512-5454 or 1-866-512-5454
 - In person at Registration & Student Records in Building 10, Second Floor
- 7 **Obtain a Tartan Card (Student I.D.)** from Registration & Student Records in Building 10, Second Floor, after submitting the initial course registration.
- 8 **Pay for Classes** by the quarterly deadline in one of these five ways:
 - **Online** at my.Sinclair.edu (click on the Web Advisor tab, then "Student," then "Finances" and finally, "Pay Now"): Visa or MasterCard only
 - **Telephone** (T-Reg) by calling (937) 512-5454 or 1-866-512-5454: Visa or MasterCard only
 - **In person** at the Bursar's (Cashier's) office in Building 10, Second Floor
 - **Mail** to Bursar's (Cashier's) office, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460
 - **FACTS Tuition Payment Plan** (facts.sinclair.edu)

Go to the New Student Enrollment Center for assistance and questions, Building 10, Fourth Floor lobby.

Transient Student

Not seeking a degree or certificate at Sinclair Community College Currently enrolled in another college or university and is taking Sinclair courses to transfer back to the home institution. **Declare Personal Interest (PI) as the major** on the Sinclair Community College admissions application.

Step

- 1 **Apply to Sinclair by completing an Application for Admission** in one of these three ways. Students will receive acceptance letters within one week.
 - Submit application online at www.sinclair.edu
 - Mail application to the address provided on the application
 - Submit the paper application in person to the Enrollment Center, Building 10, Fourth Floor lobby
- 2 **Submit Transcripts.** Have the issuing institution mail the students' "official" transcripts to **Sinclair Community College, Registration & Student Records, 444 West Third Street, Dayton, Ohio 45402-1460**. Students can bring a copy of their "unofficial transcript" or grade reports for academic advising purposes only. For questions or assistance, e-mail Sinclair at enrollmentcenter@sinclair.edu.
- 3 **Develop a Class Schedule.** Access Sinclair's online student system Web Advisor at my.Sinclair.edu to view the current course schedule. On campus, staff at Sinclair Central, Building 10, Second Floor, will help schedule days, times and sections of courses and show how to access online registration. For questions, call (937) 512-3000, or 1-800-315-3000.
- 4 **Register for Classes** in one of these three ways:
 - Online at my.Sinclair.edu by clicking on the Web Advisor tab, select "Student" and then "Register"
 - Telephone (T-Reg) by calling (937) 512-5454 or 1-866-512-5454
 - In person at Registration & Student Records in Building 10, Second Floor
- 5 **Obtain a Tartan Card (Student I.D.)** from Registration & Student Records in Building 10, Second Floor, after submitting the initial course registration.
- 6 **Pay for Classes** by the quarterly deadline in one of these five ways:
 - **Online at my.Sinclair.edu** (click on the Web Advisor tab, then "Student," then "Finances" and finally, "Pay Now"): Visa or MasterCard only
 - **Telephone** (T-Reg) by calling (937) 512-5454 or 1-866-512-5454: Visa or MasterCard only
 - **In person** at the Bursar's (Cashier's) office in Building 10, Second Floor
 - **Mail** to Bursar's (Cashier's) office, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460
 - **FACTS Tuition Payment Plan** (facts.sinclair.edu)

Go to the New Student Enrollment Center for assistance and questions, Building 10, Fourth Floor lobby.

Former Student

Returning to Sinclair after an absence of a year or more.

Step

- 1 **Complete the Sinclair Application for Admission** if students have not enrolled in classes during the past year.
 - Submit application online at www.sinclair.edu
 - Mail application to the address provided on the application
 - Submit the paper application in person to the Enrollment Center, Building 10, Fourth Floor lobby
- 2 **Meet with an Academic Advisor** or other counselor as assigned. The advisor will help students select appropriate courses based on their educational goals. Academic advisors are located in Building 6, First Floor. Call (937) 512-3700.
- 3 **Develop a Class Schedule.** Access Sinclair's online student system Web Advisor at my.Sinclair.edu to view the current course schedule. On campus, staff at Sinclair Central, Building 10, Second Floor, will help students schedule days, times and sections of their courses and show how to access online registration. For questions, call (937) 512-3000, or 1-800-315-3000.
- 4 **Register for Classes** in one of these three ways:
 - **Online at my.Sinclair.edu** by clicking on the Web Advisor tab, select "Student" and then "Register"
 - **Telephone** (T-Reg) by calling (937) 512-5454 or 1-866-512-5454
 - **In person** at Registration & Student Records in Building 10, Second Floor
- 5 **Obtain a Tartan Card (Student I.D.)**, if students do not have one already, from Registration & Student Records in Building 10, Second Floor, after submitting the initial course registration.
- 6 **Pay for Classes** by the quarterly deadline in one of these five ways:
 - **Online at my.Sinclair.edu** (click on the Web Advisor tab, then "Student," then "Finances" and finally, "Pay Now"): Visa or MasterCard only
 - **Telephone** (T-Reg) by calling (937) 512-5454 or 1-866-512-5454: Visa or MasterCard only
 - **In person** at the Bursar's (Cashier's) office in Building 10, Second Floor
 - **Mail** to Bursar's (Cashier's) office, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460
 - **FACTS Tuition Payment Plan** (facts.sinclair.edu)

Personal Interest (PI) and/or Career Development (CD)

HOW TO BEGIN

Not seeking a degree or certificate at Sinclair Community College
Taking classes for personal interest or job/career development and not seeking a degree or certificate at Sinclair. **Declare Personal Interest (PI) or Career Development (CD) as the major** on the Sinclair Community College admissions application.

Step

- 1 **Apply to Sinclair by completing an Application for Admission** in one of these three ways. Students will receive acceptance letters within one week.
 - Submit application online at www.sinclair.edu
 - Mail application to the address provided on the application
 - Submit the paper application in person to the Enrollment Center, Building 10, Fourth Floor lobby
- 2 **Develop a Class Schedule.** Access Sinclair's online student system Web Advisor at my.Sinclair.edu to view the current course schedule. On campus, staff at the Enrollment Center, Building 10, Fourth Floor lobby, will help students schedule days, times and sections of their courses and show how to access online registration. For questions, call (937) 512-3000, or 1-800-315-3000.
- 3 **Register for Classes** in one of these three ways:
 - Online at my.Sinclair.edu by clicking on the Web Advisor tab, select "Student" and then "Register"
 - Telephone (T-Reg) by calling (937) 512-5454 or 1-866-512-5454
 - In person at Registration & Student Records in Building 10, Second Floor
- 4 **Obtain a Tartan Card (Student I.D.)** from Registration & Student Records in Building 10, Second Floor, after submitting the initial course registration.
- 5 **Pay for Classes** by the quarterly deadline in one of these five ways:
 - **Online at my.Sinclair.edu** (click on the Web Advisor tab, then "Student," then "Finances" and finally, "Pay Now"): Visa or MasterCard only
 - **Telephone (T-Reg)** by calling (937) 512-5454 or 1-866-512-5454: Visa or MasterCard only
 - **In person** at the Bursar's (Cashier's) office in Building 10, Second Floor
 - **Mail** to Bursar's (Cashier's) office, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460
 - **FACTS Tuition Payment Plan (facts.sinclair.edu)**

Go to the New Student Enrollment Center for assistance and questions, Building 10, Fourth Floor lobby.

Additional Enrollment Categories

- **College Advance Program for High School Students** seeking to enroll at Sinclair while still attending high school. Obtain the College Advance Program (CAP) Petition and Registration Form from a school guidance counselor, at Admissions or Registration & Student Records at Sinclair, or on the Sinclair web site (www.sinclair.edu, click on "Future Students;," it is under Pre-college Programs).
- **Post Secondary Enrollment Options (PSEO) Program** for high school students in grades nine through twelve who are seeking to enroll in the PSEO Program must obtain a PSEO Application for Admission and instructions from their high school guidance counselor.
- **International Students** attempting to obtain an F-1 Student Visa or to enroll using other types of visa must obtain all admission materials from Registration & Student Records, Building 10, Second Floor, or online www.sinclair.edu/stservices/adm/intladm/index.cfm.
- **English as a Second Language (ESL)** students seeking to enroll at Sinclair must first meet with the ESL coordinator who will assist with application and the enrollment steps. ESL students are required to take ESL classes based on placement test results. The ESL coordinator is located in Educational Support Services, Building 10, Fourth Floor, Room 10421, (937) 512-5113.
- **Golden Age** senior citizens who are 60 years or better who want to take classes free of charge must complete a Golden Age application/registration form, available from Registration & Student Records or College for Seniors in Building 10, Room 10424. Enroll on an audit, space available basis during the Late Registration period. (937) 512-2372.

Helpful Information

Enrollment Center Assistance and Testing Hours:

Monday – Thursday	8:00 a.m. - 7:00 p.m.
Friday	8:00 a.m. - 4:00 p.m.
Saturday	9:00 a.m. - 2:00 p.m.*

* The Enrollment Center will be closed on Saturdays during summer quarter and winter break.

Be sure to allow at least two hours to complete the placement test before closing.

Access the Sinclair E-mail Account. This is how Sinclair will communicate with students about registration, financial aid, and payment. Once the application has been processed, students will receive an e-mail account. To access the e-mail account, go to my.Sinclair.edu. Once logged in, students can access their e-mail accounts by clicking on the "Student E-Mail" tab. For additional technical assistance accessing the e-mail account, students should call (937) 512-HELP (4357) or 1-866-781-4357.

Apply for Financial Aid & Scholarships. All degree and certificate seeking students can apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. Sinclair's code is 003119. Allow 4-8 weeks for processing and actual awarding of aid. Students must also complete the internal office application available from the Financial Aid & Scholarships office in Building 10, Third Floor, Room 10343 or online at www.sinclair.edu/stservices/fas/index.cfm. Submit this form to the Financial Aid & Scholarships office by the deadlines noted below. For additional information call (937) 512-3000, toll free for Ohio and Indiana residents, 1-800-315-3000.

- Priority deadline for the academic year: May 1
- Deadline for fall quarter: August 1
- Deadline for winter quarter: November 15
- Deadline for spring quarter: February 15

NOTE: The deadline dates are the dates that all forms must be submitted to Financial Aid including the results of the students' FAFSA application. It is recommended that students begin the process 3-4 weeks prior to the deadline. All communication from the Financial Aid & Scholarships office will be sent to the students' Sinclair e-mail account. Please check it regularly.

Placement Testing Preparation

- **Academic Resource Center (ARC)** Need a refresher to increase math, reading and/or writing skills before taking the college placement test or enrolling in a developmental studies course? Try the ARC first—it is free and it is easy to do! The students' skill levels are initially assessed and then they are guided through self-paced, computerized tutorials. The ARC at Sinclair is located in Building 13, First Floor, Room 13105. Questions? Call (937) 512-3495.
- **ACCUPLACER Practice Placement Test** To better prepare to take Sinclair's ACCUPLACER placement test and raise overall test scores, students may find it helpful to first take some free practice tests. Visit the study guide web site: www.testprepreview.com/accuplacer_practice.htm
- **Distance Learning Students** Living beyond 60 miles from Sinclair's main campus, students needing placement and/or academic testing may require that a test proctor be obtained. Information regarding proctored testing, the required proctor form and a listing of the testing methods for all T section courses can be found on www.sinclair.edu/distance by clicking on "Testing Information." For additional information call (937) 512-2990 or toll free 1-888-226-2457.

Purchase Books and Course Materials. Obtain the fee bill at my.Sinclair.edu (click on Web Advisor) and students must take it with them to purchase their books and required course materials at the Tartan Campus Store in Building 7, First Floor, or purchase them online at Tartanstore.sinclair.edu. For additional information, please call (937) 512-2506.

Auditing Classes Enroll on an audit, space available basis during the late registration period.

Pay all laboratory fees and purchase required books and materials. Refer to the quarterly schedule for late registration dates, or call (937) 512-3000, or toll free at 1-800-315-3000 for Ohio and Indiana residents.

Disability Services Applicants with disabilities who would like assistance can contact the office of Disability Services, Building 10, Fourth Floor, Room 10421, (937) 512-5113.

Career Services Career Services has free services including an extensive career library, computerized career guidance system, career/life development workshops, and career counseling. Call (937) 512-2772.

Residency Information obtained from the application for admission (more than the current address) will be used to determine residency for tuition purposes. Please refer to the Sinclair catalog for a comprehensive description of residency related to the fees that are assessed. If students feel they qualify as a State of Ohio or Montgomery County resident, contact the office of Registration & Student Records, (937) 512-3000 for specific policies, procedures, time frames, and required documentation.

Academic Advising Center

Building 6, First Floor, (937) 512-3700

Students are encouraged to meet with an academic counselor early in their studies at Sinclair. Academic counselors are available to assist in understanding degree requirements, selecting courses, transferring to other institutions, etc. In addition, prior to taking any action that will affect schedule, (e.g., dropping or adding a course) it is **strongly recommended that students see their academic counselor.** All academic counseling is in Building 6.

Allied Health Technologies

Room 6120
(937) 512-3029

Business Technologies

Room 6131
(937) 512-3054

Developmental Studies

Room 6222
(937) 512-2701

Engineering & Industrial Technologies

Room 6130
(937) 512-2282

Extended Learning & Human Services

Room 6130
(937) 512-2702

Fine & Performing Arts

Room 6130
(937) 512-2544

Liberal Arts & Sciences

Room 6121
(937) 512-5134

Other Counseling

Counseling Services
Room 10324
(937) 512-2752

Career Services
Room 10315
(937) 512-2772

Sinclair Central
Room 10242
(937) 512-2201

Sinclair Online

Opportunity at Your Fingertips

www.sinclair.edu

My.Sinclair.edu

Many admission and registration services are available on Sinclair's web page at www.sinclair.edu. See page 22 and 29 for details.

- Apply online
- Register online
- Pay online
- Request a course catalog
- Schedule a campus visit
- Complete the application for admission
- Search for course descriptions and quarterly class schedules
- Make name/address changes
- Get grades
- Request transcript forms
- Access Selective Service registration
- Buy books online
- RSVP for admission events

Admissions

Building 10, Room 10112
(937) 512-3000, or 1-800-315-3000 (Ohio)
www.sinclair.edu, TDD 512-2187

Hours:

Monday-Thursday	8:00 a.m.-7:00 p.m.
Friday	8:00 a.m.-5:00 p.m. (4:30 p.m. in summer)
Saturday	9:00 a.m.-12:00 noon (closed during summer)

Overview

Choosing a college is one of the most important decisions that you will make in your life. And the best way to make that decision is to schedule a time to visit the campus. The staff in Admissions is available to meet with you to discuss your educational and career goals, the variety of academic programs at Sinclair, an overview of financial aid and scholarships, and the enrollment process. Campus tours are also available. Scheduling an appointment can be done in three ways:

- On the web at dynamic.sinclair.edu/admissions_forms/appt_request/
- By telephone by calling 937-51ADMIT
- In person by stopping by Room 10112

Students tell us that they like Sinclair because it is convenient, offers a quality education and is very affordable. The tuition is \$45.00 a credit hour for Montgomery County residents, \$73.50 for other Ohio residents, and \$145.00 for those who live outside of Ohio. United States. That means a Montgomery County student who enrolls in 15 credit hours each quarter would only pay about \$1,910.00 in tuition per academic year.

Admissions serves as the Welcome Center for prospective students who want information about Sinclair. The "Welcome Center" is staffed by trained student workers who provide individuals with general information about academic programs and services to students, college publications such as catalogs and class schedules, and enrollment information.

Admissions packets include the application for admission with steps for the enrollment process, and information about admissions and financial aid, and "About Sinclair." About Sinclair contains the campus crime statistics and the graduation rates, which is information that federal law requires be shared with all prospective students. Special admissions packets are also available for the Allied Health, Paralegal, and other limited enrollment programs.

The Campus Visitation Program is offered for groups and individuals. Typically over 60 groups with over 5,000 potential students visit Sinclair on an annual basis. A "visit" includes a welcome session, a Sinclair information packet, a tour of campus, and upon request, visits to particular labs and program specific areas.

Pre-enrollment counseling for prospective students is available on an appointment or walk-in basis daily and on Saturdays when the campus is open.

Distribution of the college catalog, class schedules, other college publications and maintenance of the campus information racks of academic program literature is another function of this area.

High School Recruitment focuses Sinclair as the college of first choice for the traditional age student. This is done through high school visits and class presentations, college day/night programs, career days at the high schools, and special on-campus events such as Senior Saturdays, the Multicultural Visitation Day, Junior Discovery Day, and Spring Affair at Sinclair. Principals and counselors from area high school participate in on-campus events throughout the year to learn about new programs and services that they can share with their high school students.

Adult Recruitment is targeted to adults who are beginning or returning to college, outreach to this population is through on-site enrollment information sessions at community agencies, neighborhood centers and area churches. On-campus "Adult Advantage" Information Sessions are held on a quarterly basis. The Mobile Recruitment program takes Sinclair to the community by participating in festivals, community events, career fairs at companies, and local trade shows

Outreach and recruitment functions are targeted to the high school age and adult populations to encourage access to successful learning experiences at Sinclair. Prospective students can request information online at www.sinclair.edu and click on Future Students and then Admissions.

Golden Age Senior Citizen Applicants

Auditing a class at Sinclair can be an exciting and rewarding experience.

Those who are age 60 or better may enroll in Sinclair's classes tuition free by doing the following:

- Complete a Golden Age Application/Registration Form. This form is available at the Registration counter, Building 10, Second Floor, or from the College for Seniors office, Building 10, Fourth Floor, Room 10424.
- Enroll on an audit, space-available basis during the late registration period for each quarter. This is usually a one-week period, with the exception of registration for the summer term.
- Pay all laboratory fees, and purchase the required books and materials.
- Follow the guidelines for "Auditing a Course," as described in the catalog on page 30.

For any questions, or more information about specific classes and how to enroll, call the College for Seniors office at either (937) 512-5184 or (937) 512-2372. Visitors may go to Building 10, Fourth Floor, Room 10424.

Post Secondary Enrollment Options Program (PSEO)

PSEO permits high school students to take college classes while still enrolled in high school.

- **Option A** allows students to take college classes for college credit, and students pay for those classes.
- **Option B** allows students to take college classes for both high school and college credit, and the school district assumes the costs as long as the students comply with the program guidelines. Those costs include tuition, fees and books.

Interested students must obtain Sinclair PSEO information and application from their high school guidance counselor.

- Students **must** be counseled at the high school about the risks and the advantages of the program before they may apply for PSEO.
- Students must sign an "intent to participate in PSEO form" prior to March 30 of each year in order to be eligible for the program during the following academic year. If this deadline is not met, written permission must be obtained from the district superintendent of the school district.
- Students must submit the completed PSEO application to Sinclair's Admissions office by June 1 to be eligible for the next academic year.
- Signatures of the student, the parent or guardian, and the high school counselor are required on the application.

PSEO Class Policy

Sinclair Community College will review the final selection of college classes approved by the high school and may limit participation in any class based on such circumstances as extraordinary lab or technical fees, age, safety issues, excessive course load or academic probation, or any class offered through College Without Walls.

International Students

To obtain an F-1 student visa:

- Complete the **International Student Application for Admission and submit it to Registration & Student Records, second floor, Building 10. At the time of registration, students will be assessed a one-time, non-refundable application fee.**
- **Score 190 or above with no section score below 18 on the computer TOEFL (Test of English as a Foreign Language) or score 520 on the written version.**
- **Submit official transcript of high school completion or its equivalent with certified English translation.**
- **Complete the Sinclair Declaration and Certification of Finances form. Submit all documents at least two months prior to the first day of classes, and for applicants already in high school, submit documents one month prior to the first day of classes.**
- **Deposit with the college a tuition deposit of \$3,075, which will cover most of the first two quarters' and the last quarter's tuition and fees.**
- Any unused portion of the deposit will be refunded upon termination of studies and when appropriately requested.
- Complete the **placement tests** upon arrival and enroll in those courses indicated. Failure to do so may result in administrative withdrawal from courses.

All materials concerning international students must be obtained from Registration & Student Records, Second Floor, Building 10, or see Registration's web site at www.sinclair.edu.

Basic Skills Assessment Policy

Entry level assessment is crucial to providing students the opportunity to succeed in their educational pursuits. Educational research shows that students who are assessed and enroll in courses appropriate to their skill levels are four times as likely to succeed academically as those students who are not assessed or who ignore placement requirements. Because Sinclair Community College is committed to providing accessible, high quality education the following assessment policy was implemented fall 1990.

Prior to initial registration, students who designate themselves as degree or certificate seeking must be assessed for reading, language usage and writing, and numerical skills. Transfer students who are degree or certificate seeking and who do not have transferable equivalent math or English courses must be assessed. No degree or certificate seeking students can register for any credit courses until they have test scores on file. Special needs and English as a Second Language students should make appropriate assessment arrangements with Educational Support Services.

Students who are not degree or certificate seeking, but who are taking courses for personal interest or career development, do not have to be assessed. However, with the exception of transfer students who have math or English credits accepted for equivalent courses, ALL students who take a mathematics or English class must be assessed prior to enrolling in those classes.

Students must begin mathematics and/or English course sequences at or below the level indicated by their assessment results. Students who possess less than a tenth grade level of mastery in reading must complete DEV 063 and/or DEV 064, as a prerequisite to enrollment in any college level courses, except those specifically identified as exempt from this requirement.

Readmission Policy for Dismissed Students

HOW TO BEGIN

Student who have been dismissed from Sinclair for academic reasons and want to be readmitted, must petition for readmission. The **petition must be submitted** to the appropriate division academic counselor's office at least **three weeks before the first day of classes** for the quarter students want to enter. Only the division dean and division counselor can make exceptions to this requirement.

- A student who is **dismissed for the first time**: must remain out of school for a minimum of one quarter, including summer. (For example, if dismissal was at the end of fall quarter, the student cannot attend winter quarter, but may petition for readmission to spring quarter.)
- A student **dismissed for a second time** must remain out of school for one academic year (three quarters).
- A student **dismissed for the third time will not be readmitted to Sinclair unless there are documented, extenuating circumstances.**
- A student who has been dismissed from another college, and wants to be admitted to Sinclair must petition for admission. The student must return the completed petition to the appropriate division academic counselor's office and check the quarterly schedule of classes for the petition deadlines.
- Petitions for readmission are available in the office of the student's academic counselor.

Veterans note:

To re-establish veterans benefits, a student must bring a copy of the readmission petition to the Veterans Officer, Room 10324, after readmission to the college.

Residency Rules

Residency status of each student is determined during the admissions process. Tuition surcharges to the student and college's subsidy payments are based upon that decision. The definitions and rules used by all Ohio educational institutions are contained within the document entitled Ohio Board of Regents 3333-1-10, generically known as Rule 10.

Ohio Residency

A student who is a non-resident of Ohio must pay a tuition surcharge in addition to other fees. The following rules determine who can be considered an Ohio resident:

- To be considered a resident of Ohio a person must maintain **residence in Ohio for 12 months, be qualified to vote in Ohio and to receive state welfare benefits, and be subject to tax liability under Section 5747.02 of the Ohio Revised Code.** A person is not permitted to remain a resident of any other state or nation for any purpose within the time prescribed.
- A person who has established a place of residence in Ohio for the purpose of attending a college or university will be considered a non-resident for fee purposes.
- A person admitted to this country as a resident alien may establish Ohio residency in the same manner as any other non-resident.
- An alien admitted to this country on a student visa or other visas, which do not qualify the person to remain in this country on a permanent basis, will be considered a non-resident for fee purposes.

Within the above stated general rules, a student will be considered a resident for fee purposes if the student:

- Has resided in Ohio for at least **12 consecutive months immediately preceding enrollment and is not receiving, and has not received in that time period, financial support from persons or entities who are not residents of Ohio.**
- Is a dependent student and at least one of his or her parents or legal guardians has been a resident for at least 12 consecutive months immediately preceding enrollment.
- Is living in Ohio and employed on a self-sustaining basis in Ohio, and is attending college on a part-time basis. The student's spouse who is a full-time homemaker will also be considered gainfully employed.
- Has a parent or spouse who has accepted full-time employment and has established a place of residence in the State of Ohio as of the first day of the term the student enrolls.

Specific Exceptions

The student, his or her dependents, and spouse are considered residents of Ohio if the person:

- Is on active duty in the **armed forces of the United States and is stationed and resides in Ohio.**
- Is on active duty in the armed forces of the United States, and Ohio is the state of residence for legal purposes.
- Is transferred by his or her employer beyond the territorial limits of the 50 states of the United States and the District of Columbia, and Ohio is the state of residence for legal purposes.
- Has been employed as a migrant worker in Ohio and has worked in the state at least four months during each of the three years preceding the date of enrollment.

Montgomery County

A student who qualifies as a resident of Ohio, but does not qualify for Montgomery County residency, must pay an instructional surcharge in addition to other fees.

- The student must **qualify as a resident of the state of Ohio** in order to qualify as a resident of Montgomery County.
- A person who has established a place of residence in Montgomery County for the purpose of attending Sinclair will be considered a non-resident for fee purposes.
- A student who has been classified as a Montgomery County resident shall be considered to have lost his or her residency after he or she (or in the case of a minor), his or her parents or legal guardian move out of the county.

Within the above stated general rules, a student will be classified as a resident of Montgomery County for fee purposes if the student:

- Has resided in Montgomery County for at least **12 consecutive months immediately preceding enrollment at Sinclair, and is not receiving, and has not directly or indirectly received during that time financial support from persons or entities who are not residents of Montgomery County.**
- Is a dependent student and at least one of his or her parents or legal guardians has been a resident of Montgomery County for at least 12 consecutive months preceding enrollment.
- Is gainfully employed on a self-sustaining basis and resides in Montgomery County and is enrolled on a part-time basis (less than 12 credit hours). The spouse who is a full-time homemaker will also be considered gainfully employed.

- Has a parent or spouse who has accepted full-time employment and has established a place of residence in Montgomery County as of the first day of the term the student enrolls.

Specific Exceptions

The student, his or her dependents, and spouse will be considered residents of Montgomery County if the person:

- Is on active duty in the **armed forces** of the United States and is assigned to Wright-Patterson Air Force Base.
- Entered active duty in the **armed forces** of the United States as a resident of Montgomery County and can provide proof of eligibility to vote in the county and intends to maintain Montgomery County as the legal residence.
- Has been employed as a **migrant worker in Montgomery County and has worked in the county at least four months during each of the three years preceding the date he or she enrolled.**

If a student has been classified as a non-resident of the State of Ohio or Montgomery County, he or she must apply for reclassification when the student meets the qualifications for residency. **A change of address does not automatically change residency.**

The student must present evidence to support the request for reclassification, including proof of place of residence, place of employment, and sources of financial support. If the student is reclassified from non-resident to resident of Ohio or Montgomery County, he or she will be eligible to pay the resident fees from the date of reclassification; the reclassification will not be retroactive to any previous term.

Information concerning residency, types of documents required, and residency forms are available at the Registration & Student Records office, Second Floor, Building 10. **Requests for reclassification and supporting documents must be submitted prior to the deadline listed on the residency application.**

Payment of Fees

Students may pay their account balance online at www.sinclair.edu

Payment of fees is due at the Bursar's office by the payment deadline date published in each quarterly schedule.

- Make checks payable to **Sinclair Community College**. **The student's I.D. number should be written on the face of the check to ensure proper credit.**
- Make **VISA and MasterCard** payments at the cashier's window, through the telephone registration system, (937) 512-5454, following the voice instructions, or through WebAdvisor (login to my.Sinclair.edu, click the WebAdvisor tab, the "Student", then "Finances", and finally "Pay Now").

Check your account balance:

- Call **telephone registration at (937) 512-5454 and listen to the voice prompts.**
- Use **Web Advisor to print your "Statement for Term."**
- **Go to Registration & Student Records, second floor, Building 10, and request a fee bill.**

If a check is returned for any reason, the student must pay a processing fee plus any collection costs. Cancellation of registration may result from any unsettled bad checks, and the student will remain liable for all charges, even though no longer registered.

A student may not register, receive a transcript, or graduate if the college records are not clear of all charges and assessments.

Payment Plan

FACTS Tuition Payment Plan (available from FACTS Management Company)

FACTS is a payment plan offered to help students budget tuition costs. It automatically withdraws a non-refundable \$15 per quarter plan FACTS service fee, and the college tuition, from a credit card, checking account or savings account. This is not a loan program. There are no interest or finance charges. Students are responsible to the college for all tuition and fees incurred as a result of registration. FACTS is only a convenient budget plan to assist students in managing their costs.

Three FACTS payment dates are scheduled each term. Register early and three (3) equal payments will be withdrawn from the students' accounts on three successive months. A deposit plus a two (2) payment option is available for later enrollment through the first week of the term.

If the \$15 service fee is not available for withdrawal, by FACTS, from the students' banks or credit card, students cannot participate in the FACTS payment plan. Students not participating in the plan, must pay fees that are due on the collegewide payment dates printed in the current quarter's schedule. FACTS will charge a \$25 "returned payment fee" for each unsuccessful attempt to withdraw funds from the students' financial institution.

Prior to the college's published refund date, if a tuition payment cannot be withdrawn from the students' bank or credit card, the course registration will be in an "unpaid" status and subject to deregistration of classes. If a payment is not available from the students' financial institution after the refund date, the college may proceed with collection activity without further notice.

Enrollment is made online at facts.sinclair.edu. Students need the following information.

- The last seven digits located on the Tartan Card I.D. This is the student identification number.
- Name, address and e-mail address of the person responsible for making the payments.
- A FACTS Access Code that students will create.
- If paying from a checking or savings account, students will need the bank name, telephone number, account number and routing number (located on their checks).
- If paying from a credit or debit card, students will need the card number and expiration date.

(continued next page)

Frequently Asked Questions About FACTS

- 1. When and what time will the funds be withdrawn from my bank account?**
 FACTS specifies the date each payment will occur but it is your financial institution that determines the time of day the payment is debited. FACTS recommends you check with your financial institution to determine how far in advance funds should be deposited into your account to ensure the automatic payment clears. If a payment date falls on a weekend or holiday, the payment will be attempted the following business day.
- 2. How will I be notified of my payment information?**
 Once your agreement is posted to the FACTS system, you will receive a confirmation notification of your payment amount by email or letter. Payments will be processed until the total balance is paid in full. The notification has important information you must have to log on to My FACTS Account. The notification also serves as a reminder that a \$15.00 per quarter nonrefundable FACTS enrollment fee will be processed from the account indicated on the agreement.
- 3. What if I'm adding or dropping classes, do I need to fill out a new agreement?**
 No, Sinclair Community College will adjust your balance with FACTS if financial aid is received or adjusted or if a class is dropped or added. The change in your account must be reflected within the time period allowed, for each payment due date. If the adjustment to your account is too close to your payment due date, the adjustment will be made for the following month.
- 4. What if I don't have sufficient funds to make payments on time? (3 parts)**
Failure to pay fees or tuition payments on the agreed upon dates may result in termination of the agreement and you will not be allowed to register for the next quarter. The college is required to report any unpaid balances to the State of Ohio, Attorney General's office for collection.
- 5. What if this is my first term at Sinclair or I am returning after a one-year absence?**
 You will need to fill out and submit a new or returning Student Application to activate an account within 24 hours so you can your access to the FACTS payment plan. Consequently you cannot apply for FACTS until the day following your college registration. This may prevent you from successfully submitting a FACTS application on the last day to submit online or on the college's final payment deadline published in the quarterly schedule.
- 6. What is the FACTS Access Code?**
 To help protect your privacy, FACTS asks the person responsible for the payments to create an access code. If you should call into FACTS inquiring about your FACTS agreement or inquire online through My FACTS account, you will be required to verify your FACTS Access Code. If you do not create an access code on your FACTS agreement, one will be randomly assigned to you. Your FACTS Access Code will be identified on your FACTS Confirmation Letter. Please remember to keep a copy of your confirmation letter.

Lowest Fees in the State

Fees (per credit hour)*

The college reserves the right to change without notice statements concerning rules, policies, fees, curricula, courses, or other matters.

	Montgomery County Residents	Other Ohio Residents	Out-of-state Residents & International Residents
Students			
Instructional Fees	\$ 41.50	\$ 41.50	\$ 41.50
Instructional Surcharge		\$ 28.50	
Tuition Surcharge			\$100.00
General Fee	\$ 3.50	\$ 3.50	\$ 3.50
Total (Per Credit Hour)	\$ 45.00	\$ 73.50	\$145.00*
Other fees			
Application for Admission		\$ 20.00	
Late Registration Fee		\$ 30.00	
Graduation: Degree		\$ 25.00	
Certificate		\$ 5.00	
Transcripts (each)		\$ 5.00	
Transcripts (same day service)		\$ 10.00	

Laboratory fees determined for individual classes.

* NOTE: New incoming international (F-1) students are required to make a deposit with the college in the amount of \$3,075, which will cover most of their first two quarters and the last quarter's tuition and fees.

Refund of Fees

To receive a refund of fees, students must file **the appropriate drop/add/withdraw form** in the office of Registration & Student Records within the refund period, which is published in each quarterly class schedule.

If students withdraw by the **eighth calendar day** (including Saturday and Sunday) of fall, winter, or spring quarter, a 100% refund check will be issued without further action by students (see refund check information at the end of this section). After that date, students will receive no refund for dropped classes. Different refund schedules apply for summer quarter, and for courses that have beginning and ending dates that do not correspond to the full-length term quarter dates. **For information, contact Registration & Student Records, second floor, Building 10, (937) 512-3000.**

If students withdraw **after the eighth day of the quarter**, they will not receive a refund of tuition or fees unless the withdrawal was due to exceptional circumstances such as a medical emergency. For consideration of the specific situation, students must submit a tuition refund appeal request to the Bursar's office, Second Floor, Building 10.

If Sinclair Community College cancels the students' class, they will receive a 100% refund. Refunds are issued by check one week after the close of the refund period. Checks will be mailed to the students' home address currently on file with the Registration & Student Records office.

Selective Service Fees

Ohio law requires that all males who are not in compliance with the federal **Selective Service** laws pay out-of-state fees. All males who are 18 through 25 years of age must be registered with Selective Service. Men who are on active duty in the U.S. military service are exempt. Students who are not in compliance will be assessed out-of-state fees and, if the fees are not paid within the specified period, the students will be withdrawn from all classes. **Students may register at any U.S. post office or at www.sss.gov.** For information concerning status, call 1-708-688-2576, Monday-Friday, 8:30 a.m. - 6:45 p.m.

New Student Enrollment Center

Building 10, Room 10422

The Enrollment Center assists new students with Sinclair's new Student Enrollment Process, including:

- placement testing
- scheduling new student orientation
- an appointment with a counselor who will assist with choosing first quarter classes.

Placement testing is done on a drop-in basis—no appointment needed.

Transfer students should contact an academic/faculty advisor to determine if they will be required to participate in placement testing.

There is no charge for the first test. Students are permitted to take the test only twice, and there is a \$5.00 fee for the second test.

Testing hours are:

Monday- Thursday	8:00 a.m. - 7:00 p.m.
Friday	8:00 a.m. - 4:00 p.m.
Saturday	9:00 a.m. - 2:00 p.m. (closed summer)

Please allow approximately two-three hours to complete the tests. Holiday office hours vary.

www.sinclair.edu
my.Sinclair.edu

Registration & Student Records

www.sinclair.edu
Building 10, Second Floor
(937) 512-3000, TDD (937) 512-3096

Hours

8:00 a.m. - 7:00 p.m., Monday - Thursday
8:00 a.m. - 5:00 p.m., Friday

Summer Term

8:00 a.m. - 4:30, Friday
9:00 a.m. - 12:00 noon, Saturday before and after the first day of classes each quarter

Services

- Handles student records, registration for classes, transcripts, diplomas, Tartan I.D. cards
- Reviews student eligibility for awards such as scholarships, graduation honors, Dean's List and degrees
- Processes student personal information changes, such as change of address, residency, and name



Overview

The Registration & Student Records office handles every step of **enrolling in, changing, or withdrawing** from classes. This is the department of student records: class registration, access to grades, transcripts and diplomas. The office also issues the college **Tartan identification card**, required for accessing college services and activities. It is vital that and change of personal contact information such as name or address must be provided to Registration & Student Records.

Registration & Student Records services are readily available to students **online, by phone, or in person**. Sinclair now offers the ability to register for classes and make **credit card payments** online through the my.Sinclair portal. **Grade reports and transcript orders** are available online. Students can register, add or drop classes, and review their schedules by calling the automated **Telephone Registration System, (937) 512-5454**.

Registration information also is available by contacting Sinclair's **Call Center, (937) 512-3000**. Or, students can come in person to the second floor lobby of Building 10.

"If you really want it, you can get it!"

*—Tonnette Ewing
Graduate*

How to Get Started

There are three steps to registration for classes.

1. **See an academic advisor to discuss program and schedule needs.**
2. **Access the quarterly *Class Schedule* to select classes.**
 - **Online - My.Sinclair.edu**
About two weeks before registration begins, the schedule of classes is available online by accessing Web Advisor at My.Sinclair.edu. This is the most up-to-date schedule.
 - **In Print** - About one week before registration begins; the printed schedule is distributed at various locations on and off campus.

NOTE: Courses in the 100 series usually are recommended for first-year students and courses in the 200 series for second-year students. Those numbered below 100 are developmental courses, do not count toward a degree and may not be accepted by other colleges and universities as transfer credits.

3. Register for Classes

Sinclair students have three ways to actually register. Students should check the Sinclair web site, www.sinclair.edu or the printed quarterly schedule for the date registration will open each term and then register by any one of three methods below:

1. **Web Advisor – My.Sinclair.edu** is Sinclair’s online registration and student record system.
Adding courses, dropping courses and payment all can be done from Web Advisor. Register from home or anywhere else with computer access.
 - Registration by web begins at 12:01 a.m. on the first day of the registration period each quarter. For dates, check the calendar in the catalog, on the web, or call (937) 512-3000.
 - Log on to my.Sinclair.edu and click the Web Advisor tab.
 - Search for classes and build a schedule.
 - Register!
2. **Telephone – (937) 512-5454 or 1-866-512-5454**
 - Registration by phone begins at 12:01 a.m. on the first day of the registration period each quarter.
 - Call (937) 512-5454 or 1-866-512-5454 and follow the voice prompts.
3. **In Person – Building 10, Second Floor Lobby**
 - In-person registration begins at 8:00 a.m. on the first day of the registration period each quarter.
 - Registration forms and drop/add/withdrawal forms are available and may be processed at Sinclair Central, Building 10, Fourth Floor or in Registration & Student Records, Building 10, Second Floor Lobby.

NOTE: Registration is final when the bill is paid.

Auditing a Course

To audit a course means students:

- may attend class
- are not required to take exams
- do not receive a grade or credit
- pay the same fee as that for enrolling for credit

To register for a class to be audited:

- Registration and/or changes (adds) to audit status will be accepted only during designated late registration periods and before the first meeting of a class. Check my.Sinclair.edu for deadlines.
- Mark an “A” in the audit column on the registration card or on the drop/add form if it is a change in schedule
- Veterans may not use educational benefits to audit a course. Also, financial aid may not be used to pay for audited courses.

Changing Sections of a Course

After the drop/add period and through the last day for withdrawal with a “W” grade, students can ask permission to change to any open section of the same course. Acceptable reasons for changing sections may include class conflict with work schedule, child care, transportation or health issues. To make this change students must do the following:

- See their academic advisor if classes have begun
- Bring a drop/add form with the advisor’s signature to Registration & Student Records, Building 10, Second Floor Lobby

Dropping Courses

Before withdrawing from one or more classes, students should consult an academic advisor and meet with the Financial Aid & Scholarships office if using financial aid to pay tuition. Students may withdraw by phone or in person.

- Call the telephone registration system at (937) 512-5454 or
- Process the drop/add/withdrawal form in the office of Registration & Student Records, Building 10, Second Floor
- Or, use the web through the my.Sinclair.edu portal
- To drop or withdraw from all classes for the quarter, students may use the Call Center, (937) 512-3000.

A copy of the processed withdrawal form will be mailed to the students. This is proof of withdrawal and should be kept for the students’ records. Failure to follow one of these processes means the students will receive a grade, usually an “F,” in the class.

NOTE:

- Veterans’ benefits will be affected by withdrawal from one or more classes. Veterans should first contact the Veterans Assistance office, Building 10, Room 10324.
- Financial aid status of any students may be affected by withdrawing from one or more classes.

Deadlines are important.

To withdraw from a standard term course:

- Withdraw during the first 8 calendar days of the quarter for 100% tuition refund and no record of the class on the transcript.
- Withdrawal later than the first 8 calendar days, but during the first 8 weeks of the term, means no refund and a grade of "W" on the permanent record.
- Withdrawal after the first 8 weeks of the term results in a grade of "F" and no refund

Short term courses of less than a quarter in length have special deadlines. Students should check the online quarterly calendar at my.Sinclair.edu, or the printed quarterly class schedule.

Summer quarter has multiple terms and varying deadlines. Check the summer quarter class schedule online or in print.

Grades

Students have three ways to get their grades and should choose one of three ways.

Grades will be available the first Wednesday after the end of each quarter. There are three ways to access grades:

1. **E-mail** - A grade report will be e-mailed to all students by way of their my.Sinclair.edu e-mail address as soon as all grades for the term are received.
2. **Web Advisor** - If an official grade report is needed, students should access grades by way of their Web Advisor account, accessed through the my.Sinclair portal. Click on the "Grades by Term" link within Web Advisor. The "Grades by Term" screen will contain the students' name and should be considered an official grade report. Grades are available as instructors post them.
3. **Telephone** - Call (937) 512-5454 or 1-866-512-5454 to access grades. Follow the voice prompts. Grades will be available by phone for six weeks.

Late Registration

Students may register for open classes during Sinclair's official late registration period.

Students may not register for any course that already has met once.

- Late registration period is the week before fall, winter or spring quarter begins but only the two days preceding summer term. See the quarterly class schedule for exact dates for each term.
- A non-refundable late fee of \$30.00 is charged for all late registrations except when adding a class when the students already have registered for the term.
- To audit a class, students register during late registration; there is no late fee charge.

Note: Distance learning and College Without Walls classes are considered to have met as of 8:00 a.m. on the first day of the quarter.

Personal Data

- To change a name or address:
 - Apply online at Web Advisor at my.Sinclair.edu, or
 - Complete a change of information form at the office of Registration & Student Records, Building 10, Second Floor.
- To change a social security number, students must bring a copy of their card to the office of Registration and Student Records.
- Veterans must report any change to the Veterans office, Room 10324.

A change of address does not automatically change residency for fee purposes. For that, students must file a separate application for a change of residency and show proof of eligibility at the office of Registration & Student Records. For deadline dates, see Registration at www.sinclair.edu ; call (937) 512-3000.

Prerequisites

Some beginning or advanced courses have prerequisites: other courses that must be successfully completed first. All prerequisites are listed in the course descriptions located in the back of this catalog. Many beginning classes require the placement test or completion of developmental courses before students may enroll in them.

Transfer and transient students who want to substitute courses completed at another institution for Sinclair prerequisites may bring an unofficial transcript or a grade card to an academic advisor for review. If the students wish to receive credit for those courses at Sinclair, they must have their transcript sent from their former institution to the Sinclair office of Registration & Student Records.

Repeating a Course

Students can repeat a course for any reason. In most cases, when a course is repeated, the **most recent grade** and credit hours are used in calculating the GPA.

- All grades remain on the transcript even if they are not counted in the cumulative GPA.
- Some courses are counted in the cumulative GPA each time they are taken, and the original grade is not replaced by the subsequent one. Physical education and special topics courses are examples.
 - Such courses are designated in the course descriptions with an "R."
 - Only by special arrangements with the department chairperson can students have the original grade in such a course replaced.

NOTE: Repeating a course may affect financial aid. Veterans and other students who receive financial assistance from an outside agency should check for any agency rules that do not permit payment for courses that are taken more than once. V.A. benefits, for example, will not cover a third attempt at a failed ("F") course.

Sinclair Central

Building 10, Room 10242, (937) 512-2201

Located near the Registrar's office, Sinclair Central is there to assist with enrollment and registration. Students also may call Sinclair Central at (937) 512-2201. Computers located there and also in the Registration lobby are available for students to access current information about open classes or to register online using **Web Advisor**. Sinclair Central services include:

- Registration and scheduling assistance
- Financial aid information
- General campus information (directions, campus policies, etc.)
- Referral to specialized services on campus

The Tartan Card

Student I.D. Card

The Tartan Card, proof of student status, is **required to use college services** or participate in college sponsored activities. The card electronically stores information about the students' enrollment status.

Card readers located throughout campus scan the information and provide access for such transactions as checking out materials in the Library, using the PAC, and parking facilities. Money put on the student account via the Tartan Card can also pay for various campus services such as books, food, parking and copier use—so the students don't have to carry cash. **On campus, money can be put on cards at various transfer stations (Building 3, 7, 8, 10, 11, 13), or online (www.sinclair.edu/tartancard).**

The Bursar office has a \$25 minimum deposit requirement at the Cashier's window. Students wanting to deposit less than \$25 must use the VTS machines or the Online Card office. Money cannot be withdrawn from a Tartan Card after the deposit is made. Money may only be taken off the card upon termination of the card and by filling out a Tartan Closure from at the Bursar's office. The Tartan Closures are processed at the end of each quarter. A check minus \$10 closing fee will be mailed to the students.

To avoid possible lines, the preferred method to put money on the Tartan Card is via the web site at www.sinclair.edu/tartancard.

To get the **first Tartan Card at no charge**, present a fee bill and another photo I.D. to Registration & Student Records, second floor, Building 10. The Tartan Card does not expire, but **if the card is lost or stolen**, there is a fee for replacement. Through the card, enrollment information is automatically downloaded within 24 hours after registering for classes.

Tartan Card Advantages

- Discount on parking fee with the Tartan Card
- 5% discount on all food purchases
- 10% discount on selected gifts at Tartan Campus Store
- 50% discount on photocopies in Library



Transcripts

For official transcripts of academic work completed at Sinclair, choose from these three methods:

- **Online** – For the quickest way to order transcripts, go to www.sinclair.edu and click on the Registration & Student Records web page. Transcripts ordered online will be produced and sent in one to two (1-2) business days.
- **In person** – Process a transcript request form in Building 10, Second Floor. Same day counter service is available for a fee of \$10.00.
- **Mail** – Mail the transcript request found on the Sinclair web page to the office of Registration & Student Records. Include the student I.D. number, birth date, the term last attended at Sinclair, legal signature, day time telephone number, and payment. Cost is \$5.00 per mailed transcript.

Transcripts ordered in person or by mail will be produced and mailed in five business days.

Financial Aid & Scholarships

www.sinclair.edu
Building 10, Room 10343
(937) 512-3000, TDD (937) 512-3096

Hours

8:00 a.m. - 7:00 p.m., Monday - Thursday
8:00 a.m. - 5:00 p.m., Friday
Saturday hours are irregular; see quarterly class schedule.

Services

- Provides financial aid applications and advising
- Awards financial aid packages including federal, state, and institutional grants, loans, and scholarships

"I quickly got my life back together and enrolled at Sinclair."

*—Sean England
Graduate*



Overview

What is Financial Aid?

Financial aid is money given to students to help pay for college. Financial aid can be one of four types:

- grants
- scholarships
- work-study
- loans

Grants and scholarships are more favorable than loans because they do not have to be repaid—they're free money. In a **work-study program**, students work for a certain number of hours per week on or off-campus to earn money for college expenses. An ideal financial aid package will contain more grants and scholarships than loans. Students are encouraged to apply for as many different sources of financial aid as possible in order to pay for their college education.

To receive any kind of financial assistance with college expenses, students will need to complete two applications: first the **federal application known as the FAFSA**, which stands for Free Application for Federal Student Aid; **then Sinclair's Financial Aid Application**. For state aid, Sinclair's application is required only for the Part Time Ohio Instructional Grant. Sinclair's application is not required for donor funded and high school scholarships.

Students will receive two replies after submitting these applications. From FAFSA, students will receive a Student Aid Report (SAR) through the mail telling them the **expected family contribution (EFC)** they are to make toward college expenses. **Sinclair will send a separate letter** to students regarding their application status.

Always apply early. The process will progress from application to verification of information, to notification of financial aid awarded, to crediting the student's aid toward college expenses. It could take as little as four to six weeks from start to finish or as long as ten to twelve, depending upon individual circumstances.

Financial Need

The majority of financial aid is need-based aid. The cost of college attendance minus the students' expected family contribution determines need; in other words:

Cost of attendance - Expected Family Contribution = Financial Need

The cost of attendance is more than direct costs of tuition, fees and books. It also includes indirect college expenses such as supplies, transportation, day care and program related expenses and personal expenses.

Communication with Financial Aid & Scholarships Office

The Financial Aid & Scholarships office at Sinclair helps students meet their educational expenses. Sinclair will make every effort to help students meet the difference between college costs and the amount the family is able to pay. All awards are made on a non-discriminatory basis.

- Questions** – For information, call, write, or personally visit the office:
 - Call (937) 512-3000, Sinclair’s Call Center
 - E-mail finaid@sinclair.edu or send a letter; address: Financial Aid & Scholarship office, Sinclair Community College, 444 West Third Street, Dayton, Ohio 45402-1460.
 - Visit the office, Building 10, Room 10343 to speak with a financial aid representative.
- Results of communication** – The Financial Aid office will communicate with students about the status of their application first by letter, but thereafter through their Sinclair e-mail account. When the students’ financial aid award package has been determined, an award letter will be sent via e-mail. Students should check their college e-mail account regularly.
To access e-mail:
 - Go to www.sinclair.edu
 - Select *my.sinclair*
 - Select *Login*
 - Complete *username* (first name.lastname) and password fields. Select *Don’t know or forgot* if students do not know their username/password.
 - Select student *e-mail tab*
 - Select view mail

Note: No information regarding students’ financial aid records will be provided to anyone but the students without the students’ written permission. See a financial aid representative in Room 10343 to authorize anyone else.

Sources & Types of Financial Aid

The four primary sources of aid for students are **the federal government, the state of Ohio, the college, and private organizations.** The main provider is the federal government.

There are four general types of aid available.

Type of Aid	Provider	Basis of Award	Repayment needed?
Grants	Federal & State	Financial need	No
Scholarships	State, College, and private organizations	Financial need and/or merit	No
Work	Federal & College	Need	No
Loans	Federal & private	Financial need	Yes

See specific sections of Federal, State, and Institutional Financial Aid for more details.

Deadlines

- Deadlines are critical when applying for financial aid. **Apply as early as possible.**
- **May 1** is the annual priority deadline established by Sinclair. Apply by May 1 each year for the best chance of receiving a financial aid award for the next academic year.
- Sinclair also has established **quarterly deadlines.** See the quarterly *Class Schedule* for dates.
- After priority deadlines, there may be less state and institutional aid available. Students still may submit applications, but they may be required to pay their tuition and books themselves before receiving a reimbursement credit. See a financial aid representative for possible reimbursements.
- Students who have difficulty paying 100% of tuition and fees at the time payment is due should see the Bursar about the **FACTS payment plan.** This plan allows students to spread tuition over two or three payments. Students also may apply online at www.facts.sinclair.edu.

How to Get Started

Talk with a financial aid representative for information and assistance. A financial aid officer is available on a walk-in basis Monday - Thursday, 8:00 a.m. - 7:00 p.m., and Friday, 8:00 a.m. - 5:00 p.m.

Application Process

There are three critical first steps to qualify for financial aid of any kind:

1. First complete the Free Application for Federal Student Aid (FAFSA) each year. The need for any financial aid will be determined by the information provided in the FAFSA application
 - Available beginning in January for the following academic year (summer through spring)
 - Available from a high school guidance counselor, from the college Financial Aid office, Building 10, Room 10343, or online at www.fafsa.ed.gov. Students will need a PIN (Personal Identification Number) to complete the application online. To request a PIN, go to www.pin.ed.gov. Parents can also request a PIN for themselves at the same site.
 - Be sure to use Sinclair’s code **003119** on the application so the college can receive the results.
 - Be sure to sign the FAFSA application, certifying that all federal financial aid money will be used only for expenses related to study at Sinclair Community College.
 - Submit the application online or mail it in the envelope provided in the application packet. Apply as early as possible; processing can take four to six weeks and perhaps longer if students are selected for verification of their information.
 - If students are selected for verification, they will receive a letter asking them to provide verification documents, **Sinclair will not be able to award any federal aid until all the requested documentation has been verified.**
 - See Verification Process section for more details.
2. Complete the Sinclair Financial Aid Application. It is available in the office, Building 10, Room 10343, or it can be printed from the college web site at www.sinclair.edu/stservices/fas/20062007FinancialAidForms/index.cfm.

3. All loans and scholarships will require additional applications, available online or from the financial aid office. See Additional Information about Federal Loans and also Private/Alternative Loans for more details.

Results of Financial Aid Application

Notification: If students are eligible for financial aid, they will receive a letter via e-mail from Sinclair's Financial Aid & Scholarships office. The letter will include:

- Types of financial aid for which the student is eligible
- Amount of award available each quarter

Read the letter carefully. Students receiving federal loans will also receive a Notice of Disclosure from the U.S. Department of Education Direct Loan Servicing Center.

Payment of Aid: Students' financial aid will first be credited toward payment of tuition and fees and then for books. Look for the amount of aid on their fee bill after they have registered for classes each quarter. See Receipt/Payment of Award section for more details.

Federal Financial Aid: Grants, Work-Study, Loans

General requirements for any federal financial aid:

1. Maintain satisfactory academic progress. See the Standards of Satisfactory Progress section for details.
2. Declare a major in a degree or certificate program.
3. Be a U.S. citizen or eligible non-citizen.
4. Not be in default on a student loan or owe money back to the U.S. Department of Education for an overpayment.
5. Demonstrate financial need as determined by the students' FAFSA application.
6. Comply with current selective service registration regulations (males between the ages of 18 and 25).
7. Have a GED or a high school diploma.
Students without a GED or diploma must successfully complete Sinclair's **Accuplacer Test** of writing, reading and math skills to determine their readiness for college level course work (Ability to Benefit). The Accuplacer can be taken on a walk-in basis in the Assessment Intake Center, Building 10, Fourth Floor. Students must pass all three sections of the test at the same time to meet the requirements of the Ability to Benefit Exam.
8. Be registered and attending classes. Students are not required to attend full time, but aid is prorated for students enrolled in fewer than 12 credit hours per quarter. Those who plan to enroll for fewer than 12 credit hours should contact the Financial Aid & Scholarships office to determine the effect it will have on a grant or loan.

Federal Financial Aid Available to Students

Remember to first complete both the FAFSA and Sinclair Financial Aid applications. Applicants must meet all general federal aid eligibility requirements listed above. All federal aid is need based.

	Type of Aid	College Expenses Covered	Special Requirements
Pell Grant	Grant	• Tuition, fees, books, living expenses	• Not have a bachelor's or advanced degree • Covers maximum three college terms per year
Supplemental Educational Opportunities Grant (SEOG)	Grant	• Tuition, fees, books, living expenses	• Not have a bachelor's or advanced degree • Register for at least six hours • Have exceptional need
College Work Study (CWS)	Work	• Living expenses	Register for at least six hours
Stafford Student Loan <i>See Additional Loan Information section</i>	Loan	• Tuition, fees, books, living expenses	• Register for at least six hours • Complete loan application online or in the Financial Aid office • Complete online counseling session • Complete promissory note
Parent PLUS Loan <i>See Additional Loan Information section</i>	Loan	• Tuition, fees, books, living expenses	• Register for at least six hours • Complete parent loan application • Complete promissory note

Verification Process for FAFSA

The federal government may ask Sinclair to verify the accuracy of the students' FAFSA application. If students are selected for verification, they will receive a letter from the college, asking for documentation to support the information reported on the FAFSA application. Follow these steps:

1. Gather all paperwork or documents that the verification letter requests. It may include:
 - Student Federal Tax Return and/or W2
 - Parent Federal Tax Return and/or W2
 - Verification of untaxed income such as child support or disability
 - Proof of the number of family members in the household
 - Additional documentation as requested
2. Submit all requested information to the Financial Aid & Scholarships office, Building 10, Room 10343.
3. Sometimes students will be asked for additional documentation after submitting preliminary documents. Students should submit any additional documents as quickly as possible.

NOTE: Sinclair will not be able to award any federal financial aid until all requested information has been submitted to the college and verified by the Financial Aid office. This also applies to some state aid and institutional scholarships.

Standards of Satisfactory Progress

Standards of Satisfactory Progress are the minimum requirements the federal government feels that students should be able to meet and still be progressing toward a degree or certificate. The Financial Aid & Scholarships office is required by the U.S. Department of Education to enforce the Standards of Satisfactory Progress for all students who receive federal financial aid.

Sinclair's Standards of Satisfactory Progress policy includes:

- **Credit hour requirement:** Successfully complete 75% or more of hours attempted since first quarter at Sinclair.
- **Grade point average requirement:** Maintain a 2.0 cumulative average.
- **Maximum time frame requirement:** Complete a program of study within a limited number of credit hours.
 - Students may repeat a course for any reason and still receive financial aid. In all cases, when a course is repeated, credit hours and grades will count each time the course is taken in determining whether or not students are making satisfactory progress while receiving financial aid.
- See a financial aid officer for details of probation and appeal processes if standards are not met.

Students who fail to maintain satisfactory academic progress may appeal the removal of federal financial aid if they feel they have extenuating circumstances. These circumstances must be documented and submitted with the appeal which will be reviewed along with academic transcripts by the Financial Aid Appeals committee.

- **Regaining eligibility:** Students may regain their eligibility and have their federal financial aid reinstated after one of the following:

- Approval of an appeal or
- Successfully completing the requirements originally requested under the probation status. Students must notify the Financial Aid & Scholarships office when they believe they have met the requirements necessary for reinstatement of aid.

Note: Sinclair's Fresh Start Policy has no bearing on Standards of Satisfactory Progress.

Additional Information About Federal Loans

Loan applications are available in the financial aid office and online. These applications are in addition to the FAFSA and the standard Sinclair financial aid application.

- Complete the loan application, available in the Financial Aid & Scholarships office, Building 10, Room 10343 or print it from the web site: www.sinclair.edu/stservices/fas/20062007FinancialAidForms/index.cfm
- First time borrowers at Sinclair must complete a required online entrance counseling session. The counseling session includes information on the rights and responsibilities of the student borrower, repayment options and terms and conditions of the student loan. The online entrance counseling session can be found at the following web site: www.sinclair.edu/stservices/fas/loancounseling/index.cfm
- If the loan is approved or denied, a notification letter will be e-mailed to the students, usually within 10 to 14 days after the application is received by Financial Aid & Scholarships.
- After notification of approval, the students must see the Financial Aid & Scholarships office to complete promissory notes.
- An exit counseling session is a federal requirement of graduating students and of students who stop attending at least six credit hours of classes.

Federal Direct Stafford Loan – available to students to help meet educational expenses

- Fixed interest rate of 6.8%, effective July 1, 2006
- Maximum request of \$2,625 allowable per year
- Any additional loan amount possibility will be determined in a loan counseling session with a financial aid officer, Building 10, Room 10343.
- A loan may be subsidized or unsubsidized, depending upon financial need.
 - Subsidized loan: Federal government pays interest while students attend school.
 - Unsubsidized loan: Students pay interest either by adding interest to the loan balance or paying it directly while attending school.
- Repayment of Stafford loans will begin six months after students are no longer enrolled for at least six credit hours, graduates, or completely withdraw from school. A temporary deferment to postpone repayment can be arranged under certain qualifying conditions, including continuing education and economic hardship. Students may contact a financial aid representative for more information; but to apply for deferment, they must contact the Direct Loan Servicing Center directly at 1-800-848-0979.

Federal Direct Parent PLUS Loan – available to parents of dependent students to help meet educational expenses:

- Fixed interest rate of 8.5%, effective July 1, 2006
- Repayment begins at end of loan period
- Parent is required to go through a credit check by the federal government for loan approval.

If the parent fails the credit check and the loan is denied students may have the option of applying for an additional Federal Direct Stafford Loan. Speak with a financial aid officer to discuss the situation and the need for any additional loan amounts.

Return of Federal Financial Aid

In some cases, students may have to return federal funds to the federal government.

- Dropping all classes: Students who withdraw from all classes after the 100% refund period and prior to completing 60% of the quarter will be subject to a return of federal financial aid to the government according to this calculation:
 1. Outstanding balances on Federal Direct Loans.
 2. Federal Pell Grant awards.
 3. Federal SEOG awards.
 4. Federal Work Study programs.
- Non-attendance of classes: For students who stop attending all classes without officially withdrawing, return of federal financial aid will be calculated according to the same guidelines. If students fail to attend one or more of their classes, their financial aid may be reduced or removed.

See a financial aid officer for more information.

State Financial Aid: Grants & Scholarships

Eligibility requirements for state financial aid differ slightly from those for federal aid.

General requirements for state financial aid :

1. Be residents of Ohio, if independent students.
2. Students and their parents must be residents of Ohio, if students are dependents.
3. Be enrolled in an associate degree program. **(Certificate program students are ineligible for state grants.)**
4. Not have bachelor's or more advanced degrees.
5. Comply with current selective service registration requirements.
6. Be U.S. citizens or eligible non-citizens.
7. Be registered and attending classes.

State Financial Aid Available to Students

Remember: First, complete FAFSA and Sinclair Financial Aid application for Part Time OIG. Meet all general state aid eligibility requirements listed above.

	Type of Aid	College Expenses Covered	Special Requirements
Full-Time Ohio Instructional Grant (FT OIG)	Grant	Tuition only	<ul style="list-style-type: none"> • Register for at least 12 credit hours • If students' schedule changes to fewer than 12 hours, must re-apply for part-time OIG • Be a continuing or returning students • October 1 deadline
Part-Time Ohio Instructional Grant (PT OIG)	Grant	Tuition only	<ul style="list-style-type: none"> • Register for 1-11 credit hours • Be a continuing or returning students • Submit fee bill to Financial Aid office for the quarter in which the PT OIG should be applied
Ohio College Opportunity Grant	Grant	Tuition only	<ul style="list-style-type: none"> • Be first time college student during school year 2006-2007 • Carry 12 credit hours or more per quarter to receive 100% of the grant • October 1 deadline
Ohio War Orphans Scholarship	Scholarship	Tuition only	<ul style="list-style-type: none"> • Be the children of a disabled or deceased war veteran • Register for at least 12 credit hours • Maintain a 2.0 GPA • Contact the Ohio Board of Regents at 1 (614) 752-9528 or complete the scholarship application online at www.regents.state.oh.us/sgs/sgsstudent.html • July 1 application deadline
Ohio Academic Scholarship	Scholarship	Tuition & fees	<ul style="list-style-type: none"> • Register for at least 12 credit hours • Maintain a 2.0 GPA • Be high school graduates • Obtain scholarship application from high school counselor • February 23 deadline
Ohio National Guard Scholarship	Scholarship	Tuition only	<ul style="list-style-type: none"> • Be a National Guard member • Register for at least six credit hours • Complete scholarship application online at www.ongsp.org or contact the regional National Guard Armory

Institutional (College) Financial Aid

Sinclair Community College offers aid which is not need based through scholarships.

There are three categories of Scholarships

- 1. Donor Funded Scholarships** – Sinclair uses funds donated to the college to offer college scholarships each year to Sinclair students. Each scholarship has its own specific qualifications so it is best for students to review each scholarship posting to see if they qualify.
 - See postings on the scholarship bulletin board, Building 10, Room 10343
 - Review each scholarship for specific qualifications
 - Each posting will explain process
 - Complete the application, available in Financial Aid & Scholarships office
 - Return the application to Financial Aid & Scholarships before the deadline
- 2. Institutional Scholarships** – Sinclair offers many college funded scholarships which are awarded on a first-come, first-served fund available basis, provided the students' financial aid file is complete. Applications are available in Financial & Scholarships office. Most of these scholarships are based on need.
- 3. High School Scholarships** – Sinclair offers a variety of scholarships to new students based on high school academic performance. Sinclair is proud to award a generous amount of scholarships to incoming students each year. The deadline to apply for 2006-2007 is noted in the Financial Aid & Scholarships office. Students should see the high school counselor or the Financial Aid & Scholarships office at Sinclair for details.

Tips on Competing for Scholarships

- 1. Go after them.** You will never know until you try. Watch the scholarship bulletin board, read *The Clarion*, check the library for information and sources.
- 2. Apply for as many scholarships as possible.** For the most part you can have as many scholarships as you can earn. But remember you are not going to receive everything for which you apply.
- 3. Apply for the scholarship that matches your achievements and goals.** Remember, there are different types of scholarships. Concentrate your efforts first toward those which suit your qualifications.
- 4. Identify what you have done that sets you apart from the other applicants.** Remember, the application is your chance to set yourself apart. What have you done that is unusual, interesting, outstanding or different? Have you won contests, or held leadership positions? Tell about them. Spend time on your essay.
- 5. Be honest.** Be prepared to live up to your claims. With most scholarships receiving the award is only the first step. You usually must maintain a certain enrollment, GPA, etc., to keep the scholarship.
- 6. Appear professional.** Don't wait until the last minute. Read and follow all the directions. Type your application. Remember this is your opportunity to make a positive impression on the selection committee.

Additional Financial Support

Private/Alternative Loans

Sinclair partners with several lenders to offer loans to students who do not qualify for federal loan programs or who need additional financial assistance to meet educational expenses.

- Review the Sinclair web site, www.sinclair.edu, for a current list of lenders.
- Contact a Financial Aid officer for more information.

Regular Student Employment

Sinclair offers students regular part-time employment opportunities on campus. Unlike federal College Work Study, students do not have to demonstrate financial need. All regular non-Work-Study employment is handled in the Career Services office, Building 10, Room 10315.

- Look for job postings and get more information about available opportunities at Career Services, Building 10, Room 10315.
- All students who meet the requirements of the position offered may apply.
- Job assignments can be in a variety of areas such as clerical, media services, student activities, tutoring, or community outreach.
- Hours per week vary with each position.
- Three levels of wages are available: Rates begin at minimum wage (\$5.15) but may be increased to \$5.90 per hour or to \$6.65 per hour, depending upon experience or the requirements of the position.
- Apply in the Career Services office, Building 10 (near Building 11, Third Floor), Room 10315.

Receipt/Payment of Financial Aid

Students may receive awarded aid in the following ways:

1. **Paying fees:** First, aid will be credited to the students' account after registration for classes.
 - Caution: if the award will not pay the total amount due, the students must pay the balance or registration will be canceled.
 - Financial aid will not pay for audited classes.
 2. **Buying books:** After tuition and fees, if students have financial aid money left over for the quarter, a book charge of up to \$500 will appear on the fee bill.
 - Students should take their valid Tartan Card to the Sinclair Tartan Campus Store to charge books and supplies.
 - Check the fee bill for the dates during which book charges can be made each quarter. Dates also will be posted on the web.
 - If the required book is not in stock during the period that book charges can be made, Tartan Campus Store staff can give students a credit slip so they may charge the book and pick it up later when it is available.
 3. **Receiving any remaining balance:** If there is financial aid money left over after payment of tuition, fees, and books, students will receive a refund check at their home address after the 14th day of the quarter. Be sure to maintain a current address with the Registration & Student Records office.
- Exception for first-time Federal Stafford Loan borrowers:** Any refund will be disbursed after 31 days following the beginning of the loan period. Loans solely for one quarter will come in two disbursements: the first half after the 14th day of classes (except for new borrowers) and the second half midway through the quarter.
4. Students may be eligible to use federal financial aid for a **study abroad program**. See a financial aid officer for more information.

Important

- Financial aid cannot be used to pay for audited classes.
- Financial aid can pay for developmental (pre-college level) classes.
 - Federal aid will pay only up to 45 credit hours in developmental classes.
 - After students have attempted over 32 credit hours in developmental classes, they will receive a letter regarding the limits of their federal aid.
- Adding or dropping a class may affect students' financial aid. Talk with a financial aid representative first.
- For financial aid purposes, repeated courses count every time they are taken for credit. This differs from the college policy regarding repeated courses on transcripts.

Summer Quarter

- Federal Pell Grant, Ohio Grants, Institutional Scholarships and Loans can be used for summer quarter expenses. Ohio Grants can be used for tuition and fees. Federal Pell Grant and Institutional scholarships also will pay for books.
- To use a grant for summer term, students must complete a separate summer aid application which is available in the Financial Aid & Scholarships office, Building 10, Room 10343 or from Sinclair's web site: www.sinclair.edu/stservices/fas/20062007FinancialAidForms/index.cfm

www.sinclair.edu
my.Sinclair.edu

Academic & College Policies

Sinclair Community College Policies, Procedures & Services for Students

The purpose of these policies, procedures, and services is to help students succeed at Sinclair. Please carefully review and address any questions to instructors or the contacts provided.



"I have decided to continue on for my bachelor's degree."

—Julia Gibson
Graduate

Important College Dates

Check the listing of important college dates contained in the *Quarterly Class Schedule* including withdrawal dates, application date for graduation, etc. Students may also find these dates on the web portal at my.Sinclair.edu, using the "Campus Calendar" tab.

Administrative Withdrawal

Students may be **administratively withdrawn** from a class by their faculty member for nonattendance. They must advise students in writing **at the first class meeting** what attendance record would constitute cause for administrative withdrawal. If students do not attend the first class, it is their responsibility to obtain a copy of all materials distributed at the first class meeting.

Students may also be administratively withdrawn from classes as a result of a **student conduct hearing** with either a hearing officer or the student conduct committee. Administrative withdrawals may be made when it has been determined that the students' presence on campus is potentially detrimental to the college, faculty, staff, students or themselves.

Applying for Graduation

Graduation applications are available in the office of Registration & Student Records, Room 10231, or on the web site: www.sinclair.edu. To apply for graduation, students must first obtain a Degree Audit evaluation for the academic program/major that the students are pursuing during the quarter in which requirements will be met AND before completing the application for graduation. If the degree audit status is either "P" for pending anticipated completion or "C" complete, the students are eligible to apply for graduation. **NOTE: The students may obtain a copy of the degree audit by accessing their student information on Web Advisor.**

- If the degree audit status is "IP" in progress or "N" not started, the students should contact their academic/faculty advisor for a graduation evaluation prior to completing the application.

Then students:

- Complete the **graduation application** during the quarter in which they meet all requirements.
 - Attach a degree audit report showing pending or completed status.
 - Pay the **application fee** at the Cashier's office.
 - Return the completed application packet to the office of Registration & Student Records by the published deadline.

If students don't complete course requirements in the quarter they indicated on their graduation application, they have to reapply and pay the required fees again. College Without Walls courses must be completed in the quarter in which students apply for graduation. Students who receive incompletes for any course in the quarter in which they apply for graduation must finish the required work in the time frame stipulated in the incomplete contract. Failure to do so will result in students having to reapply and pay fees for graduation during a later quarter once the final grade is submitted.

—continued next page

Associate Degree

The commencement ceremony is held at the end of spring quarter for associate degree graduates only. Students graduating in all quarters can participate in commencement. Check the quarterly *Class Schedule* for the graduation application deadlines. Applicants for certificates may not participate in the commencement ceremony.

Associate Degree

To be degree candidates, the students must:

- Fulfill requirements of the degree program and the institution.
- Complete a **minimum of 90 credit hours** (accredited programs must meet accreditation association requirements and students must earn the **last 30 credit hours** of their academic program on campus at Sinclair).
- Maintain a cumulative **grade point average of at least 2.0**.
- Complete an application for graduation in the office of Registration & Student Records, Second Floor, Building 10, by deadline dates published in quarterly class schedules.

Students have to meet degree requirements listed in the Sinclair catalog in effect at the time they begin study. However, if the course of study is prolonged beyond six years after beginning, consult with the department chairperson to determine graduation requirements. Sinclair will consider granting permission to graduate under a catalog more than six years old if they have been enrolled continuously and the degree program has not changed appreciably. Requests for this exception should be directed to the program chairperson and be approved by the division dean.

Begin a Four-Year Degree

Begin a four-year degree by taking advantage of Sinclair's small class sizes, caring faculty, supportive staff and low tuition.

Students can:

- Complete many freshman and sophomore level courses before transferring to a four-year institution.
- Earn a Sinclair associate degree and apply many of those credits toward a bachelor's degree.
- Complete most of the general education requirements by taking courses from the Transfer Module, before transferring to a four-year institution.

Changing an Academic Program

In order to change from one academic program (major) to another, students have to meet with an academic/faculty advisor (from the division housing their new academic program), who will implement the change. This change will be indicated on their record and will not affect the cumulative grade point average.

Certificate Programs

Certificate programs recognized by the Ohio Board of Regents **require completion of a minimum of 45 credit hours** of a specific curriculum with an overall grade point average of at least 2.0. To qualify for a Certificate of Completion, students must complete at least 13 credit hours of Sinclair course work within the area of study and fulfill the institution's requirements. Students must apply for the certificate by printing, completing and submitting the Application for Certificate posted on Sinclair's web site: www.sinclair.edu. The application can also be picked up on the Second Floor, Building 10. A Degree Audit for the certificate program must be submitted with the application. Students can print their Degree Audit by accessing their Web Advisor account.

Code of Student Conduct & Disciplinary Policy

Student Activities, Building 8, Room 8025, (937) 512-2509
Student Handbooks are available in the Student Activities office, or at www.sinclair.edu/stservices/sact/StudentHandbook/conduct/index.cfm

The mission of the Sinclair code of conduct is to provide an atmosphere which is conducive to study and educational growth and one that enables students to develop in a positive manner. By virtue of enrollment at Sinclair Community College, students consent to follow the policies and procedures of Sinclair.

In order to assure this type of environment, the Board of Trustees has adopted standards of conduct for the students, faculty, staff and visitors to the campus. College officials including, but not limited to, the manager of Student Activities, who has been designated to handle student grievances/judicial affairs, shall have the responsibility and authority for the discipline of all students in accordance with college policy as well as the authority to impose formal sanctions as described in this document.

Disciplinary action as described in the *Student Handbook* may be taken against a person who has been admitted to Sinclair, as well as against student organizations and guests to the campus.

This Student Conduct Policy has been established to provide guidance for enforcing this policy at Sinclair Community College.

Procedures for student conduct are listed in the *Student Handbook*.

College Examinations

College Level Equivalency Examinations

Advanced Placement Examinations

Sinclair participates in the Advanced Placement Program for secondary schools. The Academic Credit Assessment Information Center and the academic departments determine the amount of credit awarded.

Policies:

- Students must have applied for admission, been accepted at Sinclair and paid the appropriate fees.
- Receive a three or better on the Advanced Placement Program examinations.
- The course(s) will be recorded on the students' transcript with a "Y" grade.

- Students can apply no more than 45 credit hours earned through APP/proficiency examinations /articulation agreements/ACE/CREDIT/CLEP/DANTES toward degree requirements.
- Credits earned via APP examinations do not apply toward the college residency requirements.

College Level Examination Program (CLEP)

www.collegeboard.com

Sinclair awards credit for the College Level Examination Program based on the scores they earn. The Academic Credit Assessment Information Center and the academic department determine the amount of credit awarded.

Policies:

- Students must have applied for admission, been accepted at Sinclair, and paid the appropriate fees.
- Course(s) will be recorded on their transcripts with a "Y" grade.
- They can apply no more than 45 credit hours earned through APP/proficiency examinations/articulation agreements/ACE/CREDIT/CLEP/DANTES toward degree requirements.
- Credits earned via CLEP examinations do not apply toward the college residency requirements.

Defense Activity for Non-Traditional Education Support (DANTES)

www.getcollegecredit.com

Sinclair awards credit for the DANTES Examinations based on the scores earned. The Academic Credit Assessment Information Center and the academic department determine the amount of credit awarded.

Policies:

- Students must have completed a Sinclair Community College application and paid the appropriate fees.
- The course(s) will be recorded on their transcript with a "Y" grade.
- Students can apply no more than 45 credit hours earned through APP/proficiency examinations/articulation agreements/ACE/CREDIT/CLEP/DANTES toward degree requirements.
- Credits earned via APP examinations do not apply toward the college residency requirements.

Proficiency/Challenge Examinations

To earn credit for certain courses without enrolling in them, students must take a special examination and/or perform special assignments through the appropriate department. Credit by examination requires departmental approval. This process is coordinated by the Academic Credit Assessment Information Center. For each proficiency examination, students have to pay a non-refundable fee.

Policies:

- Students have to obtain departmental approval before taking a proficiency examination.
- Students cannot take a **proficiency examination** until they have completed a Sinclair Community College application and paid the appropriate fee.
- Students must have successfully completed course prerequisites before taking the **proficiency challenge examination**. Exceptions to this requirement are made at the discretion of the department chairperson.

- Students can take a proficiency examination only once for any course. If they have taken a course and received a failing grade, with departmental approval they can take a proficiency examination one time in order to improve the grade. The grade for the proficiency exam replaces the previous grade, if they have taken the course only once.
- A proficiency examination cannot be taken nor credit awarded during any quarter in which they were previously registered for that course.
- They will be **awarded** an "A", "B", "C", or "F" for a proficiency examination; however, only an "A", "B", or "C" grade will be **recorded** on their transcript.
- They can apply no more than 45 credit hours earned through proficiency/challenge examinations toward degree requirements.
- Proficiency credits do not apply toward the college residency requirements.
- Proficiency fees are non-refundable.
- Proficiency examination grades are recorded on the transcript with a notation that clearly shows which grades are the result of taking a proficiency/challenge examination.

Credit at Other Colleges

Articulation Agreements

Articulation agreements are formal agreements between organizations detailing the recognition of college credit between those organizations. Sinclair uses articulation agreements as a means to **avoid duplication of resources** and to encourage and enhance students' interest in post secondary education and transfer from one institution to another.

The college has developed articulation agreements with secondary schools, hospitals, professional organizations, and colleges and universities.

Articulation agreements can be categorized in two ways:

- **Incoming agreements** with secondary schools, hospitals and professional organizations indicate how credits will be recognized at Sinclair Community College.
- **Outgoing agreements** with other colleges and universities indicate how Sinclair Community College programs and courses will transfer to those institutions. The specific agreements are detailed in transfer guides, which may be obtained from an academic/faculty advisor. The following is a list of some of the colleges and universities Sinclair Community College has worked with in the past:

- | | |
|----------------------------------|----------------------------|
| • Andrews University | • Indiana State University |
| • Antioch McGregor University | • Kettering University |
| • Art Academy of Cincinnati | • Miami University |
| • Bellevue University | • Ohio State University |
| • Bowling Green State University | • University of Cincinnati |
| • Capital University | • University of Dayton |
| • Central State University | • University of Toledo |
| • College of Mt. St. Joseph | • Urbana University |
| • DeVry University | • Wilberforce University |
| • Ferris State University | • Wittenberg University |
| • Governors State University | • Wright State University |

In addition to "incoming" and "outgoing" agreements, the college has several **One-Plus-One** agreements with certain community colleges. These agreements detail how students can begin a program at one institution and complete it at a partner school.

All articulation agreements are maintained in one central location, the **Academic Credit Assessment Information**

—continued next page

Dean's List

Center. The center serves as an information source, as well as a clearinghouse to ensure that the credits for the incoming articulation agreements are recorded on the student's permanent record.

Policies:

- Students must have applied for admission, been accepted, and paid the appropriate fee before any credits earned through articulation agreements can be recorded on their record.
- Pay an administrative fee for each articulation agreement they processed.
- Provide documentation of successful completion of requirements per the agreement. Each department is responsible for determining appropriate documentation.
- Obtain departmental approval before the information will be recorded on their transcript by the office of Registration & Student Records.
- The course(s) will be recorded on their transcript with a "Y" grade.
- Students can apply no more than 45 credit hours earned through proficiency examinations or articulation agreements toward their degree requirements.
- **Credits earned via an articulation agreement do not apply toward the college residency requirements.**

Since the development of articulation agreements with Ohio colleges and universities is an ongoing process, students should check with their academic/faculty advisors for the most current listing of agreements. A complete list of all agreements is available in the Academic Credit Assessment Information Center.

For detailed information about the guarantee of transfer credit see an academic advisor.

Dean's List & Academic Honors

To be eligible for the Dean's List in any quarter, students must have:

- Six or more credit hours of college level course work
- A grade point average of 3.4 with no grade below a "C" for that term
- Good academic standing

Courses for which students earn grades of "X", "IP", "I", "W", "P", "N", "S", or "Y" are not computed in the total credit hours attempted. Their placement on the Dean's List will be noted on their academic transcript.

Graduation honors are also noted on the transcript. Sinclair awards "graduation honors" for a cumulative grade point average of 3.4 to 3.899. The college awards "high honors" for a cumulative grade point average of 3.900 and above. For further information concerning Honors programs, see page 77.

Degree Audit

How Am I Doing?

Degree audit is a process that indicates the students' progress toward the completion of a degree program. Students can request a degree audit from an academic advisor to determine how many classes they have completed for a specific academic program. If they change academic programs, a different degree audit must be done. Degree audits may also be done on the web (my.Sinclair.edu, click on "Web Advisor"), or at the information kiosk.

Dropping a Course

Students who drop a course during the fall, winter and spring quarters within the first eight calendar days (including Saturday and Sunday), will receive a 100 percent refund and no record of a grade for that course. Deadlines for summer courses and short-term, nonstandard courses have different drop deadlines. Consult the **Quarterly Class Schedule** or electronic **Campus Calendar** for these deadlines. If students drop a course after the first eight calendar days but before the last day to withdraw, they will receive a "W." Students may not drop a course after the last day to withdraw. Consult the **Quarterly Class Schedule** or electronic **Campus Calendar** for specific deadline dates.

Students may also drop courses by calling the office of Registration & Student Records [(937) 512-3000 or 1-800-315-3000], online using "Web Advisor" at my.Sinclair.edu or accessing the telephone registration system (937) 512-5454. If students call the office of Registration & Student Records, make sure to ask that a copy of the drop form be mailed to them.

Educational Support Services

Students may be eligible for free educational assistance if enrolled for credit. Contact Tutorial Services in Room 10444 or call (937) 512-2792. Tutoring is usually not provided for 200 level courses that have a prerequisite or for developmental courses in which there are tutors. Assistance is available to eligible students through the office of Disability Services, Room 10421, or call (937) 512-5113. Students are responsible for informing their instructor of any instructional accommodations and/or special learning needs at the beginning of the quarter. Tutoring information is available at www.sinclair.edu/departments/tutorial. English as a Second Language information and services are available in Room 10421 or call (937) 512-5113.

Fresh Start Policy

Fresh Start allows students, who have returned to the college after an absence of at least three years (12 academic quarters), and has completed specific requirements, a **one-time-only** option of having their grade point average recalculated from the point of re-enrollment without losing credit for previous course work for which a grade of "S", "P", or "C" or better was earned.

The academic Fresh Start Policy and its conditions are as follows:

1. To be eligible for Fresh Start, students must:
 - be re-enrolled in the college after an absence of at least three calendar years (12 academic quarters)
 - have successfully completed any required Developmental Studies (DEV) courses any time during their college experience based on an assessment of reading, language usage, writing and numerical skills **NOTE: Although students may have taken placement tests and completed DEV courses prior to their return, re-testing may be appropriate for course placement based on students' current skills. Students should meet with an academic advisor to discuss testing and course selection.**

- Successful completion of a minimum of six credit hours after re-enrollment with grades of “S”, “P” or “C” or better. The following are examples of completion of the minimum first six credit hours. DEV courses do not count toward the 6 credit hours.
 - **Example #1** - First quarter: 6 hours
 - **Example #2** - First quarter: 3 hours; Second quarter: 3 hours
 - **Example #3** - First quarter: 12 hours
 - **Example #4** - First quarter: 2 hours; Second quarter: 3 hours; Third quarter: 8 hours
 - request in writing that the policy be applied and the cumulative GPA be recalculated.
2. The policy can be **applied only once** and only to classes taken before re-enrollment. Once approved, the application of this policy against the students’ record is irrevocable.
 3. After students elect Fresh Start and eligibility is verified, **a notation will be added to the students’ transcript** indicating that all Sinclair credit hours earned prior to policy enactment will be subject to the following conditions:
 - the previous cumulative GPA is recalculated based upon the elimination of “D”, “F”, and “Z” grades
 - credit earned at Sinclair with a grade of at least “S”, “P”, “C” or higher is carried over
 - credit earned at Sinclair with a grade of “D” is forfeited
 - grades from all course work taken at Sinclair will be shown on the transcript
 4. Fresh Start may not be applied to any course completed **prior** to the award by the college of an Ohio Board of Regents authorized certificate or associate degree.

The academic transcript will show:

The Fresh Start Policy has been applied for academic work taken at Sinclair prior to _____.

Term/Year

Grades

Grades will be available the first Wednesday after the end of the quarter. Students should choose one of the following ways to access their grades:

1. **E-mail**—A grade report will be e-mailed to all students by way of their My.Sinclair.edu e-mail address. Grades will be e-mailed as soon as all grades for the term are received. If an official grade report is needed, students should access their grades by way of their Web Advisor account.
2. **Web Advisor**—Students may get an official grade report through their Web Advisor account. Web Advisor is accessed through the My.Sinclair.edu portal. Grades can be found by clicking on the “Grades by Term” link within Web Advisor. The “Grades by Term” screen will contain the students’ name and should be considered an official grade report.
3. **Telephone**—Students may call (937) 512-5454 or 1-866-512-5454 to access their grades. Students should follow voice prompts to get their grades. If an official grade report is needed, students should access their grades by way of their Web Advisor account.

Grades & Grade Point Average

Grades are issued at the end of each quarter. Letter grades earn a number of quality points per credit hour. The most commonly used model is listed below as an example for how grade point averages are computed.

Grade	Quality Points	Grade	Quality Points	
A Excellent	4	90-100%	S Satisfactory	0
B Good	3	80-89	U Unsatisfactory	0
C Average	2	70-79	I Incomplete	0
D Passing	1	60-69	W Withdrawal	0
F Failure	0	0-59	P Pass	0
Z Non-Attendance	0	0-59	N Progress	0
			Y Proficiency Credit	0
			IP In Progress	0
			X Audit	0

The grade point average is computed by dividing the total points earned by the total credit hours attempted. Courses in which a student earns grades of “X”, “I”, “W”, “P”, “N”, “S”, “IP”, U, or “Y” are not computed in the total credit hours attempted.

For example:

Course	Credit hours	Grade	Points
English Composition I	3	B	9
College Algebra	5	C	10
General Psychology I	3	A	12
Western Civilization I	3	B	9
Physical Education	1	A	4
TOTALS	15		44

44 ÷ 15 = 2.933 Grade Point Average

Students may be given an “I” if their work has been passing but a specific course assignment has not been completed. The students must contact their instructor and request an “I” grade. If the instructor agrees, the student AND instructor must sign the “Incomplete Grade Contract.” When the required work is completed within 30 calendar days after the beginning of the next term, a grade will be submitted for the “I” grade. If this is not removed within this time, the “I” becomes an “F.” This time limit may be extended by special permission of the instructor.

If the students fail to contact the instructor to arrange an incomplete grade, the instructor is required to assign an “F” instead of an “I” for the quarter’s work. For cases in which hardships are involved, the students may make up the work which could change the “F” to the grade otherwise deserved. The instructor’s permission is required.

An “N” grade indicates the students attended classes and made satisfactory progress but didn’t complete all course requirements.

A “Z” grade indicates the students were registered for class but never attended.

To challenge a grade the students believe is incorrect, they must contact the instructor as soon as possible. Under no circumstances will a grade be changed after two years have elapsed from the end of the quarter in which the grade was recorded. Within the two-year limitation, a petition may be filed with the office of the senior vice president for Instruction asking consideration for change of “F” grade to “W,” ONLY if emergency circumstances supported by documentation prevented either withdrawal by deadline date or completion of class requirements after that date.

Sinclair Guarantee

What happens **after** graduation? The **Sinclair Guarantee of Graduate Quality** gives graduates two guarantees they can count on:

- A guarantee of transfer credit for graduates receiving Associate of Arts and Associate of Science degrees at Sinclair Community College, for entering a university parallel/transfer program with confidence
- A guarantee of job competency for those who have obtained an Associate of Applied Science degree at the college and wish to enter a technical career program

This tuition-free education as described below constitutes the sole and exclusive remedy under the **Sinclair Guarantee of Graduate Quality**.

Guarantee of Transfer Credit

(A.A. and A.S. Degrees)

Thinking about pursuing a four-year degree? Sinclair Community College guarantees to its Associate of Arts and Associate of Science graduates, the transfer of course credits to those Ohio colleges or universities that have articulation agreements with Sinclair Community College.

And, if the articulation agreement contains courses that are not accepted by the college or university, students can take alternate courses at Sinclair, acceptable to the receiving college or university, (up to nine hours) **tuition free!**

The guarantee applies only to courses included in a written transfer/articulation plan that must be on file in the Academic Credit Assessment Information Center. Transfer must take place within 12 months of graduation.

Limitations on the total number of credits accepted in transfer, grades required, relevant grade point average, and duration of transferability apply as stated in the catalog of the receiving institution.

Cost of books, insurance, laboratory and activity fees, and other course related expenses are the responsibility of the graduates.

For details about the guarantee see an academic advisor.

Guarantee for Job Competency

(A.A.S. Degrees)

Graduates looking for a technical job should be sure to tell potential employers that they are Sinclair graduates. Many of them know that Sinclair Community College guarantees appropriate technical job skills identified in the program outcomes for a specific degree to its Associate of Applied Science graduates.

And, if the employer feels the graduates are lacking in technical job skills identified by the program outcomes for the specific degree program, the college will provide the graduates with up to nine (9) **tuition free** quarter credit hours of additional training by Sinclair Community College, under the conditions of the guarantee policy.

The guarantee applies only to graduates employed on a full-time basis directly related to the area of program concentration as certified by the vice president for Instruction. Employment must commence within twelve (12) months of graduation.

Cost of books, insurance, uniforms, laboratory and activity fees, and other course related expenses are the responsibility of the graduates and/or the employers.

Special Conditions for the Job Competency Guarantee

The employer must:

- Certify in writing the employee is lacking job skills related directly to the degree's program outcomes.
- Specify areas of deficiency within six months of the initial employment.
- Develop a written educational plan for retraining the graduate in cooperation with the appropriate academic department at the college.
- Retraining will be limited to nine (9) quarter hours of credit related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan, and must be completed within a calendar year from the time the educational plan is agreed upon.
- The guarantee does not imply the graduate will pass any licensing or qualifying examination for a particular career.

Late Registration & Change of Schedule

Late and audit registration will be the week before classes begin. During this period, students may register for, or add, any class that is open. A late fee of \$30 will be assessed if they register after the on-time registration ends. This late fee does not apply to audit courses. **After the beginning of the quarter, students will not be permitted to register for any course that has already met for the first time.** Distance Learning courses begin at 8:00 a.m. on the first day of the quarter. No Distance Learning course may be added once classes begin.

Students may register to audit a course during the week before classes begin. **Students may not change from audit to credit, nor credit to audit status any time in the registration process.** Students will not receive credit for classes they audit, nor can they qualify for veterans benefits for classes they audit.

Military Training

www.acenet.com

Sinclair evaluates military training according to the American Council on Education recommendations. Contact the Registration & Student Records office for a list of official documentation that is acceptable for evaluation.

Policies:

- Students must have applied for admission, been accepted at Sinclair, and paid fees.
- Students will receive credit only if Sinclair offers an equivalent course.
- Students who have received or transferred credit for a comparable college course, Sinclair will not award credit.
- Credit awarded is treated as transfer credit at Sinclair.
- Credits awarded as a result of military training do not apply toward the college residency requirements.

Miscellaneous College Policies

Attendance

Students are expected to be present at all class sessions. It is the students' responsibility to read and understand the class attendance policy or the web/video course participation policy that will be defined in the syllabus for each course. It is the faculty member's responsibility to define attendance or participation requirements and to monitor and record the students' fulfillment of these requirements. It is a program's prerogative to have specific policies across multiple sections due to the unique requirements of that program. Attendance for traditional classes or participation for web/video classes may affect final grades, financial aid eligibility, and V.A. benefits.

Children in Classes

Children (and others who are not officially enrolled) are not permitted in classrooms or laboratories when classes are in session.

Sexual Harassment Policy

It is the policy of Sinclair Community College to maintain an environment free from discrimination. Sexual harassment is a form of discrimination and may be a violation of Title IX of the Civil Rights Act of 1964. Accordingly, sexual harassment is hereby prohibited.

Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment under certain conditions.

See *Student Handbook* for a list of prohibitive behaviors.

Smoking Policy

In 1988 the Sinclair Board of Trustees, upon the recommendation of a campuswide committee, adopted a smoking policy that prohibits smoking in designated locations on the campus. Because of the continued concerns about the health and comfort of the Sinclair community, the committee, faculty, staff and student groups recommended in 1993 that Sinclair's campus is smoke free. Smoking is permitted outdoors.

Safety & Security

Campus Police

(937) 512-2534, 512-2700

Students may access the Campus Police web site at www.sinclair.edu/departments/police for information on safety, crime reports/statistics, the department's annual report, and other services. For more information, contact the Campus Police department in Building 7, Room 7112 or call (937) 512-2534.

Standards of Academic Progress

Academic Intervention, Probation, Dismissal

- All students must maintain a minimum academic performance of at least a 2.0 GPA cumulatively (2.0 or greater).
- Students will be placed on the following academic standards:
 - First quarter below 2.0 GPA - Academic Intervention
 - Second consecutive quarter below 2.0 GPA - Academic Probation
 - Third consecutive quarter below 2.0 GPA - Academic Dismissal
- Students will be returned to good academic standing when a cumulative GPA of 2.0 or greater is earned.
- Students who are on academic intervention will receive correspondence that refers students to academic/faculty advisors, and Student Services for advising, academic assistance, and information on the impact on financial aid.
- Students who are on academic probation must be seen by an academic/faculty advisor to:
 - register or add classes
 - receive additional support information or assistance.
- Students whose quarter GPA is 2.0 or greater, but whose cumulative GPA would cause them to be dismissed, will be granted an additional probationary period for each quarter in which the quarter GPA is 2.0 or greater.

Student Behavior Guidelines

Students should treat their classes as they would a desirable job. The instructor is a team leader and their fellow students are co-workers. Everyone must work together to complete learning objectives. These behaviors are expected of students:

- Attend all classes on time.
- Respect the rights of others to contribute by listening attentively. Show consideration for students, instructors and other college employees.
- Participate appropriately and actively on topics presented in class.
- Complete assignments on time.
- Ask for feedback from instructors and peers to insure progress toward learning objectives.
- Resolve problems by immediately discussing issues with instructors and/or peers.

Student rights and responsibilities are detailed in the **Sinclair Community College Student Handbook** available in Student Activities, Room 8025 or online at www.sinclair.edu/stservices/sact/StudentHandbook/index.cfm.

Student Records Policy

Students have the right to inspect and review their education records. To do so, they should submit a written request to the office of Registration & Student Records, specifying the records desired and their location. The request will be granted as soon as practicable, but in no more than 45 days.

Students' right to inspect and review records does not extend to personal notes of faculty or staff, law enforcement records maintained by the Campus Police, medical treatment records, their parents' financial records, and certain confidential letters and recommendations.

If upon inspection and review of the students' records, they wish to challenge (correct or delete) inaccurate or misleading data or any records which they believe violate their right to privacy or other rights, they may request a correction or deletion in writing. If the record custodian denies the request, the students will be given a copy of the record(s) in question, and they have the right to request a hearing in writing. Submit the request to the vice president for Student Services specifying the portion of the record to be challenged, the reason(s) and the desired change(s). The record challenge hearing will be held within a reasonable time of the request; a written decision will be issued. If the students are not satisfied, they may submit written comment(s) which will be maintained with the challenged record(s).

The Family Educational Rights & Privacy Act (FERPA) affords a student certain rights with respect to educational records. **Copies of educational records or personally identifiable information concerning students will not be released to anyone outside the college, except as required or allowed by law, without their written consent.** However, directory information may be released without their written consent. **Directory information includes:** the students name, address, e-mail address, I.D., photo, telephone number, date and place of birth, major field of study, participation in Sinclair activities and sports, weight and height of members of athletic teams, dates of attendance at Sinclair, degrees, certificates and awards received, and the most recent previous educational institution attended. If the students do not want their directory information released, they must complete a form requesting it not be released and file the form with the director of Registration & Student Records.

The Sinclair Student Records Policy is available for review and inspection at the office of Registration & Student Records. A copy is available upon request and also on the web. Problems or questions concerning the Sinclair Records Policy may be brought to the FERPA coordinator, director of Registration & Student Records. Students also have the right to file complaints with the U.S. Department of Education FERPA office.

Testing Center

Building 10, Fourth Floor, (937) 512-3076

The Testing Center, in addition to placement testing, provides academic testing for students collegewide. The Tartan Card or an Ohio driver's license is required for academic testing.

Students may call the Testing Center at (937) 512-3076 to verify that their exam is on file and ready to be administered. Children are not permitted in the center and may not be left unattended in the lobby.

Transfer

Begin a Four-Year Degree

Begin a four-year degree by taking advantage of Sinclair's small class sizes, caring faculty, supportive staff and low tuition.

Students can:

- Complete many freshman and sophomore level courses before transferring to a four-year institution.
- Earn a Sinclair associate degree and apply many of those credits toward a bachelor's degree.
- Complete most of the general education requirements by taking courses from the Transfer Module, before transferring to a four-year institution.

How to Begin

See page 17 for Incoming and Transient students.

"My story says that it is never too late to get an education!"

*—Robert Nelson
Graduate*



Transfer to and from Sinclair follows a few easy steps. Be sure to check with a Sinclair academic advisor and the transfer institution.

Transfer of Credit TO Sinclair

To make sure that credits from another institution transfer efficiently to Sinclair, follow these steps:

1. Have official **transcripts sent directly** from the student's previous college(s)/university(ies) to the office of Registration & Student Records at Sinclair. Once Sinclair receives the transcripts, the student will receive notification in the mail of how to proceed. **Be sure to contact the academic/faculty advisors for the program to have all credits evaluated before registering.** Academic/faculty advisors may need the student to provide course descriptions/syllabi in order to accurately evaluate transfer credits. Please note: registration will not recognize transfer credits that have been accepted but not evaluated.
2. Students who have transfer credit for English and/or mathematics equivalent to courses offered at Sinclair, **contact the appropriate academic/faculty advisors before taking the placement test.**
3. Students required to take the placement test, go to Building 10, Fourth Floor, Room 10445, or call (937) 512-2210 for additional information.
4. Students who were dismissed from a previous institution, please **follow the Readmission Policy** explained on page ??.

Transfer of Credit FROM Sinclair

To make sure that Sinclair credits transfer efficiently to another institution (referred to here as "transfer institution"), follow these steps:

1. Meet with the appropriate Sinclair academic/faculty advisor AND speak with a representative at the transfer institution early and often during an academic career. This will help ensure that the student is selecting the appropriate courses.
 2. Follow the transfer admissions procedures for that institution.
 3. Have official Sinclair transcripts sent to the transfer institution, and follow up to ensure that they have received and evaluated the transfer credits.
- Remember:**
- **Speak with an academic/faculty advisor** early in the academic career. It's the students' responsibility to keep them aware of the intended academic program and/or transfer institution.
 - **Contact the transfer institution** as soon as possible. Ask for specific course recommendations from them to help with structuring a degree program at Sinclair as closely as possible around their requirements. Also, speaking to counselors from both institutions helps ensure that students receive timely, accurate transfer information.
 - **Always confirm course choices with the transfer institution.** Because Sinclair is accredited by the Higher Learning Commission of the North Central Association and is a member of the association as well as the Ohio Board of Regents, most credits will transfer to other colleges and universities. University Parallel courses usually transfer more easily than technical courses.

Guarantee of Transfer Credit

(A.A. and A.S. Degrees)

Thinking about pursuing a four-year degree? Sinclair Community College guarantees to its Associate of Arts and Associate of Science graduates, the transfer of course credits to those Ohio colleges or universities that have articulation agreements with Sinclair Community College.

And, if the articulation agreement contains courses that are not accepted by the college or university, students can take alternate courses at Sinclair, acceptable to the receiving college or university, (up to nine hours) **tuition free!**

The guarantee applies only to courses included in a written transfer/articulation plan that must be on file in the Academic Credit Assessment Information Center. Transfer must take place within 12 months of graduation.

Limitations on the total number of credits accepted in transfer, grades required, relevant grade point average, and duration of transferability apply as stated in the catalog of the receiving institution.

Cost of books, insurance, laboratory and activity fees, and other course related expenses are the responsibility of the graduate.

For details about the guarantee see an academic counselor.

Credit at Other Colleges

Articulation Agreements

Articulation agreements are formal agreements between organizations detailing the recognition of college credit between those organizations. Sinclair uses articulation agreements as a means to **avoid duplication of resources** and to encourage and enhance students' interest in post secondary education and transfer from one institution to another.

The college has developed articulation agreements with secondary schools, hospitals, professional organizations, and colleges and universities.

Articulation agreements can be categorized in two ways:

- **Incoming agreements** with secondary schools, hospitals and professional organizations indicate how credits will be recognized at Sinclair Community College. Detailed information regarding incoming agreements is available at the Academic Credit Assessment Information Center, Room 6142, (937) 512-2800.
- **Outgoing agreements** with other colleges and universities indicate how Sinclair Community College programs and courses will transfer to those institutions. The specific agreements are detailed in transfer guides, which may be obtained from an academic counselor/faculty advisor. The following is a list of some of the colleges and universities Sinclair Community College has worked with in the past:

• Andrews University	• Indiana State University
• Antioch McGregor University	• Kettering University
• Art Academy of Cincinnati	• Miami University
• Bellevue University	• Ohio State University
• Bowling Green State University	• University of Cincinnati
• Capital University	• University of Dayton
• Central State University	• University of Toledo
• College of Mt. St. Joseph	• Urbana University
• DeVry University	• Wilberforce University
• Ferris State University	• Wittenberg University
• Governors State University	• Wright State University

In addition to "incoming" and "outgoing" agreements, the college has several **One-Plus-One** agreements with certain community colleges. These agreements detail how students can begin a program at one institution and complete it at a partner school.

All articulation agreements are maintained in one central location, the **Academic Credit Assessment Information Center**. The center serves as an information source, as well as a clearinghouse to ensure that the credits for the incoming articulation agreements are recorded on the student's permanent record.

Policies:

- Students must have applied for admission, been accepted, and paid the appropriate fee before any credits earned through articulation agreements can be recorded on their record.
- Pay an administrative fee for each articulation agreement they processed.
- Provide documentation of successful completion of requirements per the agreement. Each department is responsible for determining appropriate documentation.
- Obtain departmental approval before the information will be recorded on their transcript by the office of Registration & Student Records.
- The course(s) will be recorded on their transcript with a "Y" grade.
- Students can apply no more than 45 credit hours earned through proficiency examinations or articulation agreements toward their degree requirements.
- **Credits earned via an articulation agreement do not apply toward the college residency requirements.**

Since the development of articulation agreements with Ohio colleges and universities is an ongoing process, students should check with their academic counselors/faculty advisors for the most current listing of agreements. A complete list of all agreements is available in the Academic Credit Assessment Information Center.

For detailed information about the guarantee of transfer credit see an academic counselor.

Articulation & Transfer Institutional Transfer

The Ohio Board of Regents, following the directive of the Ohio General Assembly, developed a statewide policy to facilitate students' ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. Since independent colleges and universities in Ohio may or may not be participating in the transfer policy, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements.

Transfer Module

The Ohio Board of Regents' Transfer and Articulation Policy established the Transfer Module, which is a subset or entire set of a college or university's general education program. Transfer Module consists of 54 to 60 quarter hours (or 36 to 40 semester hours) of courses in the following areas: English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary study.

A Transfer Module completed at one college or university will automatically meet the requirements of the Transfer Module at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the Transfer Module at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the Transfer Module portion of Institution R's general education program. Institution R, however, may require additional general education courses beyond the Transfer Module.

Since many degree programs require specific courses that may be taken as a part of the general education or Transfer Module program at an institution, students are encouraged to meet with an academic advisor at the institution to which they plan to transfer early in their academic career. For example, students who will be majoring in any of the majors in the College of Business and Administration at the receiving institution should take Economics 201, 202, and 203 (or equivalent course at another institution) rather than the Economics 200 course listed as a part of the Transfer Module. Because of specific major requirements such as these, early identification of a student's intended major is encouraged. Advisors at the institution to which a student wishes to transfer should be consulted regarding Transfer Module and general education courses and any specific program requirements that can be completed before transfer.

Conditions for Transfer Admission

1. The policy encourages receiving institutions to give preferential consideration for admission to students who complete the Associate of Arts or Associate of Science degree with a cumulative grade point of 2.0 or better for all previous college level courses.
2. The policy encourages receiving institutions to give preferential treatment to students who have not earned an Associate of Arts or Associate of Science degree but have earned 60 semester hours or 90 quarter hours with a cumulative grade point of 2.0 or better for all previous college level courses.
3. The policy further encourages that students who have not earned an Associate of Arts or Associate of Science degree or who have not earned 60 semester hours or 90 quarter hours with a cumulative grade point of 2.0 or better for all previous college level courses are eligible for admission as transfer students on a competitive basis.

Acceptance of Transfer Credit

1. Students who have completed the Associate of Arts or Associate of Science degree with a cumulative grade point of 2.0 or better will receive transfer credit for all college level courses in which a grade of D or better has been earned.
2. Students who have not earned an Associate of Arts or Associate of Science degree will receive transfer credit for all college level courses in which a grade of C or better has been earned.

Admission to a given institution, however, does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at the institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as all other students. Furthermore, transfer student shall be accorded the same class standing and other privileges as all other students on the basis of the number of credits earned. All residency requirements must be successfully completed at the receiving institution prior to the granting of a degree.

Responsibilities of Students

In order to facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisor and the college or university to which they plan to transfer.

Appeals Process

A student disagreeing with the application of transfer credit by the receiving institution shall be informed of the right to appeal the decision and of the process for filing the appeal. Each institution shall make available to students the appeal process for that specific college or university. If a transfer student's appeal is denied by the institution after all appeal levels within the institution have been exhausted, the institution shall advise the student in writing of the availability and process of appeal to the state-level Articulation and Transfer Appeals Review Committee. The Appeals Review Committee shall review and recommend to institutions the resolutions of individual cases of appeal from transfer students who have exhausted all local appeal mechanism concerning applicability of transfer credits at receiving institutions.

Ohio Transfer Tools

Transfer Assurance Guides (TAGs)

TAGs are groups of foundational courses that represent a commonly accepted pathway to the bachelor's degree. Courses or course sequences identified as being a part of the TAG may be offered at any public higher education institution in Ohio. TAGs are being developed to assist students in approximately 40 different degree pathways and are guided by the following principles:

1. The Ohio Transfer Module (OTA) continues to be the foundation of the articulation and transfer work. The OTM provides students the opportunity to transfer courses as a block or on an individual course basis.
2. Students will also have the opportunity to complete additional courses found within each TAG and be guaranteed that the courses will transfer and apply to degree/program requirements. Each TAG may include recommended courses from within the Ohio Transfer Module as well as a variable number of introductory level major courses. This will provide a very powerful advising tool for students and faculty. Students will be able to plan a viable pathway using all the resources of the public higher education system, beginning at any point along the pathway, from high school through college. For more information of the Transfer Assurance Guides, visit the Ohio Board of Regents web site at www.regents.state.oh.us/tags.

Transfer Module

The Transfer Module is a subset or the complete set of a college or university's general education requirements. The Transfer Module consists of 54-60 quarter hours or 36 to 40 semester hours of courses in the following areas:

1. English
2. mathematics
3. arts and humanities
4. social and behavioral science
5. natural and physical sciences, and
6. interdisciplinary study.

A Transfer Module completed at one Ohio, public college or university will automatically meet the requirements of the Transfer Module at another Ohio, public college or university once the students are accepted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer that are not included in the Transfer Module.

Completing the Transfer Module

When completing the Transfer Module at Sinclair prior to transferring to a four-year institution, students are guaranteed completion of the Transfer Module requirements at any state college or university in the state of Ohio.

To finish the requirements for the Transfer Module at Sinclair, students have to start by completing the required minimum hours of the Transfer Module from each **section on the following list**. The total number of "minimum hours" is equal to 42. Since the Transfer Module at Sinclair **requires 54 quarter hours to be complete, students should consult with their academic advisor to determine the most appropriate courses—depending on their academic program and transfer institution—to take to complete the Transfer Module.**

NOTE: The Transfer Module is updated twice per year. Consult academic/faculty advisors for the most up-to-date list of approved courses.

Sinclair's Transfer Module

English Composition

(9 quarter hours)

ENG 111	English Composition I	(3)
ENG 112	English Composition II	(3)
ENG 113	English Composition III	(3)

Mathematics

(minimum of 3 quarter hours)

MAT 108	Math & the Modern World	(3)
MAT 116	College Algebra	(5)
MAT 117	Trigonometry	(4)
MAT 122	Statistics I	(4)
MAT 132	Technical Mathematics II	(5)
MAT 133	Technical Mathematics III	(5)
MAT 134	Technical Mathematics IV	(5)
MAT 151	Introduction to Mathematical Modeling	(3)
MAT 201	Calculus & Analytic Geometry I	(5)
MAT 202	Calculus & Analytic Geometry II	(5)
MAT 203	Calculus & Analytic Geometry III	(5)
MAT 204	Calculus & Analytic Geometry IV	(5)
MAT 215	Differential Equations	(5)
MAT 216	Elements of Linear Algebra	(4)
MAT 218	Calculus for Business & Economics	(5)
MAT 220	Statistics II	(4)

Natural & Physical Sciences

(minimum of 12 quarter hours, 3 courses from one sequence)

AST 101	Survey of Astronomy	(4)
AST 111/117	Introduction to Astronomy	(4)
AST 112/118	The Solar System	(4)
AST 113/119	Stars, Galaxies, & Cosmology	(4)
BIO 111/117	General Biology I	(4)
BIO 112/118	General Biology II	(4)
BIO 113/119	General Biology III	(4)
BIO 141/147	Principles of Anatomy & Physiology I	(4)
BIO 142/148	Principles of Anatomy & Physiology II	(4)
BIO 143/149	Principles of Anatomy & Physiology III	(4)
BIO 171/177	Principles of Biology I	(5)
BIO 172/178	Principles of Biology II	(5)
BIO 173/179	Principles of Biology III	(5)
BIO 205/206	Microbiology	(4)
BIO 222	Evolution	(3)
BIO 225/226	Ecology	(4)
BIO 235/236	Introduction to Genetics	(4)
CHE 141/147	College Chemistry I	(4)
CHE 142/148	College Chemistry II	(4)
CHE 143/149	College Chemistry III	(4)
CHE 151/157	General Chemistry I	(5)
CHE 152/158	General Chemistry II	(5)
CHE 153/159	General Chemistry III	(5)
CHE 201/207	Organic Chemistry I	(5)
CHE 202/208	Organic Chemistry II	(5)
CHE 203/209	Organic Chemistry III	(5)
GLG 141/147	General Geology I	(4)
GLG 142/148	General Geology II	(4)
GLG 143/149	General Geology III	(4)
GLG 144	Geological Field Trips	(4)
PHY 100/110	Introduction to Physics	(4)
PHY 104/119	Sound, Light & Modern Physics	(4)
PHY 141	College Physics I	(4)
PHY 142	College Physics II	(4)
PHY 143	College Physics III	(4)
PHY 201	General Physics I	(5)
PHY 202	General Physics II	(5)
PHY 203	General Physics III	(5)

Social & Behavioral Sciences

(minimum of 9 quarter hours from at least two areas)

ECO 201	Principles of Economics I	(3)
ECO 202	Principles of Economics II	(3)
ECO 203	Principles of Economics III	(3)
ECO 216	Principles of Macroeconomics	(3)
ECO 218	Principles of Microeconomics	(3)
GEO 101	Physical Geography	(4)
GEO 102	Human Geography	(3)
GEO 201	World Regional Geography I	(3)
GEO 202	World Regional Geography II	(3)
HIS 219	Survey of the Middle East	(3)
PLS 101	American Federal Government I	(3)
PLS 102	American Federal Government II	(3)
PLS 103	State Government	(3)

PLS 104	Urban Government	(3)
PLS 200	Political Life, Systems & Issues	(3)
PLS 201	International Relations I	(3)
PSY 119	General Psychology	(5)
PSY 121	General Psychology I	(3)
PSY 122	General Psychology II	(3)
PSY 205	Child Development	(4)
PSY 206	Adolescent & Adult Psychology	(3)
PSY 207	Psychology of Aging	(3)
PSY 208	Life Span & Human Development	(5)
PSY 217	Abnormal Psychology	(4)
PSY 223	Cognitive Psychology	(4)
PSY 225	Social Psychology	(4)
PSY 228	Psychology in the Work Place	(4)
PSY 242	Educational Psychology	(4)
SOC 111	General Sociology I	(3)
SOC 112	General Sociology II	(3)
SOC 120	General Sociology	(5)
SOC 145	Comparing Cultures	(3)
SOC 160	Social Patterns in Aging	(3)
SOC 205	Social Problems	(4)
SOC 208	The Urban Environment	(3)
SOC 215	Cultural Diversity	(4)
SOC 226	Criminology	(3)

Arts & Humanities

(minimum of 9 quarter hours from at least two areas)

ART 101	Art Appreciation I	(3)
ART 102	Art Appreciation II	(3)
ART 125	African Art	(3)
ART 231	Art of the Ancient World	(3)
ART 232	Art of the Medieval & Renaissance Worlds	(3)
ART 233	Art of the Modern World	(3)
ART 235	History of Photography	(3)
ART 236	History of Women Artists	(3)
DAN 155	Dance History	(3)
DAN 157	Dance Appreciation	(3)
HIS 101	U.S. History (1607-1815)	(3)
HIS 102	U.S. History (1815-1919)	(3)
HIS 103	U.S. History (1919-Present)	(3)
HIS 105	African-American History	(4)
HIS 111	Western Civilization (0-1300)	(3)
HIS 112	Western Civilization (1300-1815)	(3)
HIS 113	Western Civilization (1815-Present)	(3)
HIS 214	History of Southeast Asia	(3)
HIS 215	Survey of African History	(3)
HIS 216	Survey of Latin American History	(3)
HIS 217	Survey of East Asia	(3)
HIS 218	History of Ohio	(3)
HUM 125	The Human Image	(3)
HUM 130	Humanities & Challenge Technology	(3)
HUM 131	Search for Utopia	(3)
HUM 135	Environmental Ethics	(3)
HUM 255	People & Religion	(3)
LIT 201	Survey of English Literature (to 1660)	(3)
LIT 202	Survey of English Literature (1660-1832)	(3)
LIT 203	Survey of English Literature (1832-Present)	(3)
LIT 211	Survey of American Literature I	(3)
LIT 212	Middle American Literature	(3)
LIT 213	Modern American Literature	(3)
LIT 217	Images of Women in Literature	(3)
LIT 227	Introduction to Shakespeare	(3)
LIT 230	Great Books of the Western World	(3)
LIT 234	Literature of Africa, Asia, & Latin America	(3)
LIT 240	Children's Literature	(3)
MUS 115	Music Appreciation	(3)
MUS 131	Survey of Musical Styles I	(3)
MUS 132	Survey of Musical Styles II	(3)
MUS 133	Survey of Musical Styles III	(3)
PHI 204	Great Books: Philosophy	(3)
PHI 205	Introduction to Philosophy	(3)
PHI 206	Personal Ethics	(3)
REL 111	Eastern Religions	(3)
REL 112	Western Religions	(3)
REL 135	American Religious Movements	(3)
REL 204	Great Books: The Bible & Western Culture	(3)
THE 105	Introduction to Theatre	(3)
THE 201	History of Theatre I	(3)
THE 202	History of Theatre II	(3)
THE 203	History of Theatre III	(3)

Other Approved Courses

ENG 250	Personal Essay: Advanced Composition	(3)
COM 211	Effective Speaking I	(3)

Course Applicability System (CAS)

CAS is a free, web-based tool that provides students information about academic programs and course equivalencies in the state of Ohio. CAS can be used by students to plan their transfer to another Ohio college or university. Access CAS at www.transfer.org.

Sections of information on the web include the following:

- **Course Descriptions** show information on courses such as the title, credit hours and terms available.
- **Academic Programs** allow students to view all of the programs offered at the institution of choice.
- The **Course Equivalency** guide is to find out how courses transfer from one institution to another.
- **Your Courses** allow students to enter their course work from any college or university.
- The **Planning Guide** will evaluate those courses electronically so it can be determined how they will apply toward a selected program.
- **Account Information** allows students to store all common personal information entered on admissions applications. This information can then be sent to schools who will accept them electronically.
- **Student Services** provides links to extra information about an institution such as admission information or financial aid assistance.
- **Help** allows students to send any questions they have regarding transfer to a college or university.

Ohio Learning Network - Distance Education

The Ohio Learning Network provides an online course catalog at www.ohiolearns.org to help Ohioans find information regarding online degrees, certificates, and courses offered by accredited Ohio colleges and universities.

TRANSFER

www.sinclair.edu
my.Sinclair.edu

Alternative Learning

There are almost as many alternatives to learning as there are offerings from Sinclair.

See the next few pages to fit your lifestyle.

"After being laid off I decided to pursue a lifelong dream of being involved in law enforcement."

—*Esther Roberts*
Graduate



Cooperative Education & Internship

Sinclair supports the concept that valuable learning occurs in settings other than the traditional classroom. Internship and Cooperative Education opportunities allow students to apply skills and competencies learned in the classroom in a work based setting. In many programs, students can earn actual degree credit while enrolled in academic internship courses.

For more information about Business Technologies or Liberal Arts & Sciences, go to Building 10, Room 10311, call (937) 512-2769, e-mail co-op@sinclair.edu, or visit www.sinclair.edu/academics/bus/intern. For more information about Engineering & Industrial Technologies or Fine & Performing Arts, go to Building 3, Room 3120, call (937) 512-2508, or e-mail terry.maiwurm@sinclair.edu. Students enrolled in other divisions should contact their academic departments or counselors for information.

Corporate & Community Services

Building 12, Room 12101, (937) 512-3061

The Corporate & Community Services division administers and coordinates activities of the David H. Ponitz Sinclair Center, Building 12. The division:

- Schedules, coordinates and supports corporate and community training and education throughout the college.
- Customizes such programs to meet the training and education needs of the Miami Valley.
- Coordinates college sponsored seminars and non-credit registrations.
- Coordinates all class scheduling for both on- and off-campus non-credit programs and courses, as well as off-campus credit courses conducted at businesses, industries, and non-profit organizations.
- Arranges publicity for non-credit programs open to the general public, registers students, maintains non-credit student enrollment records and transcripts, and provides certificates of completion.

Seminars and courses open to the general public are publicized in the quarterly schedule of classes or are announced by special mailings. For further information, call (937) 512-3061.

Experience Based Education (EBE)

The Experience Based Education department supports a broad range of non-traditional study opportunities and evaluation of prior learning for college credit to help students develop career and lifelong learning skills, and achieve their educational and professional goals.

Academic Credit Assessment Information Center (ACAIC)

Building 6, Room 6142, (937) 512-2800

The Academic Credit Assessment Information Center is designed to help students learn about non-traditional ways to receive credit for Sinclair classes:

- Articulation agreements with various institutions' licenses and certifications
 - **College equivalency examinations (proficiency exams, CLEP, DANTES, and advanced placement exams)**
 - **ACE/CREDIT course recommendations**
 - **Evaluation of prior learning by portfolio [see Credit for Lifelong Learning Program (CLLP) for details]**
- For more information, contact the ACAIC.

Associate of Individualized Study (A.I.S.)

Building 3, Room 3142, (937) 512-2791

Through the Associate of Individualized Study, students can design an interdisciplinary degree program using liberal arts or combining liberal arts with technical areas of study. They can focus specifically on education for individual development and enrichment, or design a curriculum with a goal of employment or continuation to selected four-year degree programs. Faculty members assist students in the degree planning process.

For more information, contact the A.I.S. office.

Associate of Technical Study (A.T.S.)

Building 3, Room 3142, (937) 512-2791

If technical degree goals can't be accomplished through enrollment in one of Sinclair's existing degree programs, students may check out the A.T.S. degree.

Students can design a degree that combines two or more technical areas from existing Sinclair programs into a new, individualized degree plan. And, as an alternative, students may be able to incorporate credit awarded through articulation agreements as a portion of their degree requirements. Faculty members will help plan the most appropriate course of study to reach student goals.

For more information, contact the A.T.S. office.

College Without Walls (CWW)

Building 3, Room 3142, (937) 512-2791

Students who need extended time to learn with special circumstances, should check out College Without Walls. Students have one to two quarters to complete CWW courses. Courses from a variety of disciplines are available.

Credit for Lifelong Learning Program (CLLP)

Building 6, Room 6142, (937) 512-2800

Credit for Lifelong Learning evaluates students' learning experiences—from work, volunteer services, conferences, workshop attendance, in-service training, vocational interests, or independent research—for college credit. Students document learning by developing a portfolio.

The students' portfolios consist of a written description of the learning with supporting documentation. The process begins with a course, **EBE 100**, Prior Learning Portfolio Development, in which students identify specific Sinclair courses, demonstrate college level learning, and develop plans to accomplish professional and educational goals. Faculty members knowledgeable in each specific area of learning then evaluate the portfolio for college credit and award a grade. There is an evaluation fee for each course evaluated.

Developmental Studies Program (DEV)

Building 6, Room 6222, (937) 512-2701

The Developmental Studies program is designed to assist students in adjusting to college through special academic and counseling support services.

Incoming full-time students are required to take skill tests in reading, English and mathematics. If resulting scores are below established requirements, students may be required to enroll in one or more Developmental courses. Students who just want to improve their skills, can also enroll in the Developmental Studies program.

A variety of courses is offered in mathematics, reading, English, science, and English as a Second Language (E.S.L.). Instructors work closely with students to meet their learning needs. Students may also receive individual help through the Tutoring & Learning Center in the Library.

Service Learning

Building 6, Room 6141, (937) 512-2040

Service Learning is a teaching and learning strategy that provides students with community based opportunities to meet course objectives that connect classroom instruction to the real world. Through participation in Service Learning Projects, students meet course objectives, develop and explore academic, personal, social, and career goals while they are meeting community needs. Service Learning is used in various courses as a requirement or as an alternative assignment. Students may also ask their faculty members to include a Service Learning course. Students completing Service Learning projects and activities receive documents to enhance their portfolio. Service Learning agencies and projects are listed on the Sinclair Service Learning web site www.sinclair.edu/about/learning.

International Study Abroad

Building 16, Room 16118, (937) 512-5306

Studying abroad allows students to get to know and understand another country's culture and everyday life. Students become more aware of perspectives that may be different than their own.

Through study abroad opportunities, ranging from a few weeks to an entire academic year, students can earn academic credit in a wide variety of disciplines.

To qualify, they need to have a grade point average of 2.0 or better at Sinclair and meet any other specific requirements of the particular study abroad opportunity.

Information about the international Student I.D. Card (I.S.I.D.), overseas medical insurance, and study abroad opportunities is available in the Study Abroad office, Room 16118.

Sinclair Honors Program

See page 77.

College for Seniors

Building 10, Room 10424, (937) 512-5184

Lifelong learning—It's exciting to broaden knowledge while building new experiences. And exercise is good for our health, whether it's physical or mental.

For seniors who are age 60 or better, Sinclair offers many ways to incorporate learning and exercise into a daily routine. For example, Sinclair offers swimming or water aerobics, tennis or Tai Chi; or explore areas such as painting, pottery, vocal training, piano classes, Appalachian Culture, Western Civilization, a foreign language, history, or politics.

Sinclair welcomes seniors and has an assortment of opportunities.

1. **Seniors may audit credit classes** tuition free on a space available basis. To enroll, go to the Registration counter, Second Floor, Building 10 during the late registration period for each quarter. A special College for Seniors desk is there with representatives to help with class choices and the enrollment process. Classes are tuition free, but seniors will need to pay for any special or laboratory fees associated with the class. Seniors will find all of Sinclair's classes listed in the quarterly class schedule.
2. **Classes from the credit curriculum are offered** at 25 senior citizen and community centers each quarter. Those who are age 60 or better may audit the classes at these sites tuition free. Registration is at each site, a few of which may ask seniors to become a member. These classes are also listed in Sinclair's quarterly class schedule.
3. **Short term, non-credit courses designed for seniors** and their interests are offered through the Senior Academy. These classes meet both on campus and at various sites across the community and include a number of computer classes, writing classes, and additional special interest topics, as well as tours of Dayton landmarks, attendance at arts performances, and other sessions in the community. Some classes carry a small fee to cover the costs of instruction, while others are free. These classes are listed in the College for Seniors quarterly class schedule, which is distributed to more than 8,000 people. Also included is information featuring the College for Seniors Advisory Board, new courses, and articles about Sinclair students.

For further information, for more information about specific classes and how to enroll, call College for Seniors, (937) 512-5184 or (937) 512-2372, or visit in person in Building 10, Fourth Floor, Room 10424.

Sinclair Ohio Fellows Leadership Program

See page 77.

Southwestern Ohio Council for Higher Education (SOCHE)

www.soche.org

Full-time students at Sinclair can register for courses for credit at SOCHE institutions (see below for a complete list) at Sinclair's rate per credit hour. Students **need to pay any applicable lab or related fees at the host institution. To take advantage of this program:**

- The course cannot be available at Sinclair.
- Space must be available at the SOCHE institution, only during regular sessions of the academic year (summer sessions and self-supporting or sustaining programs are excluded).
- Students must:
 - Have counselor's permission.
 - Satisfy all course prerequisites.
 - Meet the host institution's admissions requirements.

For more information, contact the office of Registration & Student Records, Second Floor, Building 10, or the SOCHE web site, www.soche.org.

The consortium of 20 colleges and universities, three corporate partners, and one foundation was established to promote inter-institutional cooperation and community service. SOCHE:

- Holds regular conferences for faculty and staff.
- Serves as a clearinghouse for the exchange of information.
- Promotes projects of educational research and experimentation.

Many cooperative programs exist in teaching, research, publishing, college finance and administration and other areas.

Consortium schools include: Air Force Institute of Technology, Antioch University, Capital University-Dayton Center, Cedarville University, Central State University, Clark State Community College, Edison State Community College, Kettering College of Medical Arts, Miami-Jacobs College, Sinclair Community College, Southern State Community College, United Theological Seminary, Union Institute & University, University of Dayton, University of Phoenix Dayton-Troy Center, Urbana University, Wilberforce University, Wilmington College, Wittenberg University, and Wright State University.

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Sinclair Campus Centers

Dayton Campus

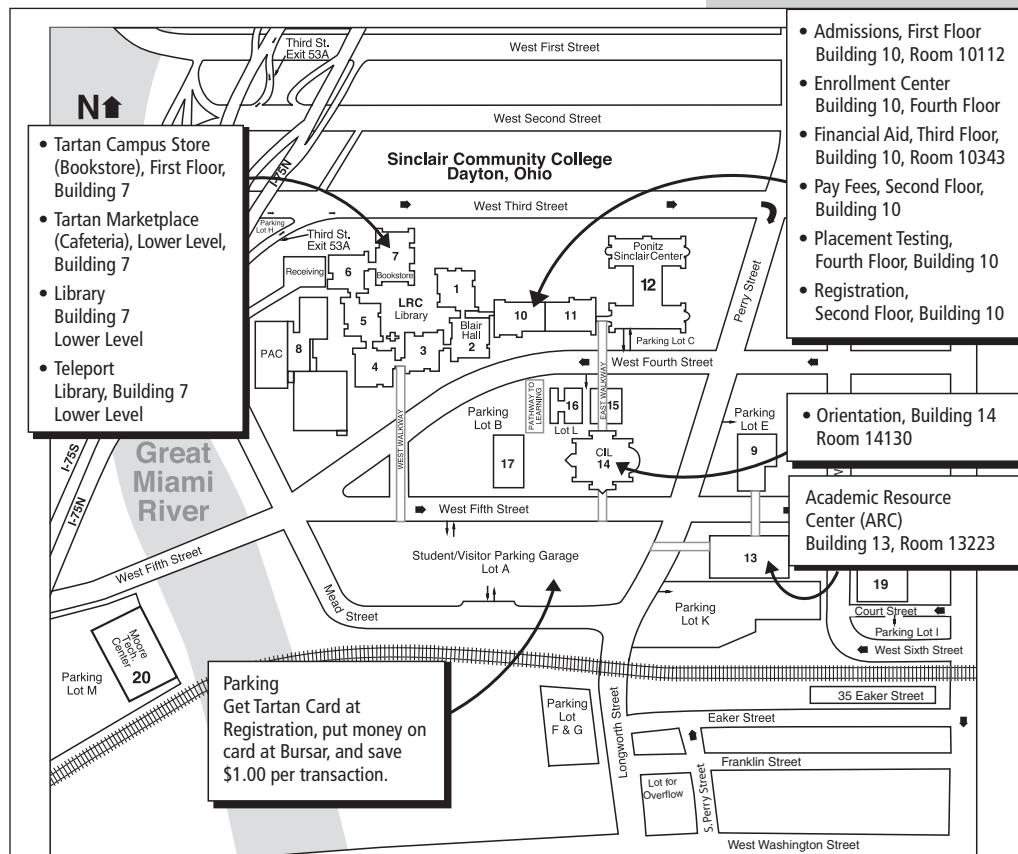
Next to I-75 on the western edge of downtown Dayton, Sinclair's campus stretches from West Third to Fifth and Perry streets and beyond. Wherever students go—on the over 50 acres of campus—they're greeted by beautiful architecture and green spaces. Plus, underground corridors and covered walkways keep students out of the weather—and on time!

How to Find a Classroom

Finding the way around is easy—once you get the hang of it. Classroom numbers are made up of the building number first and the floor level next, and the last numbers complete the classroom number. (By the way, the building numbers don't totally follow in order; be sure to grab a map and don't hesitate to ask someone for help.)

Room	Building	Floor	Actual Number on Room
1324	1	3	1324
8024	8	0 (lower level)	8024
20113	20	1	20113

Buildings 1-7 surround the main plaza. The college Library stretches beneath. Enter the Library from the basement level of all seven buildings or get to Building 8 (PAC) from the basement level. Buildings 9, 13, 14 can be entered through the Fifth Street or Lot A parking garage.



Finding a Place to Park

Sinclair student parking is a real bargain with the Tartan Card. (For more details on the Tartan Card see page 32).

Students can park:

- **Lot A**, in the multi-level parking garage, west of South Perry Street (enter/exit from West Fifth or Mead streets). Motorcycle parking available only in Lot A.
- **Lot M**, at Building 20, (enter/exit from Fifth Street).
- **Lot E**, on South Perry Street, between Fourth and Fifth streets. Entrance is from Perry Street and is mainly an employee parking lot.
- **Lot H** under I-75 on Robert Drive.
- **Lot I** serves Building 19, entrance from Ludlow Street.
- **Lot K** is close to Mead Street, entrance from Longworth Street.
- **Lot C** serves the David H. Ponitz Sinclair Center (Building 12), but includes parking for the disabled and students on a space available basis. Entrance from Fourth Street.
- **Lot B** is an employee lot.
- **Parking for the disabled is located in all student lots.**

Normal hours of operation for fall, winter, and spring quarters are:

	Monday - Thursday	Friday	Saturday
Lot A	6:30 a.m.-10:30 p.m.	6:30 a.m.-6:00 p.m.	6:30 a.m.-6:00 p.m.
Lot B	6:00 p.m.-8:00 p.m.	Opens at 3:00 p.m. (Free Parking)	Opens at 3:00 p.m. (Free Parking)
Lot E	7:00 a.m.-10:00 p.m.	7:00 a.m.-6:00 p.m.	CLOSED No Student Parking
Lot H	7:30 a.m.-10:00 p.m.	7:30 a.m.-6:00 p.m.	CLOSED No Student Parking
Lot I	7:00 a.m.-10:00 p.m.	7:00 a.m.-10:00 p.m.	As needed
Lot K	7:00 a.m.-5:30 p.m.	7:00 a.m.-5:30 p.m.	CLOSED No Student Parking
Lot M	6:30 a.m.-7:00 p.m.	6:30 a.m.-4:00 p.m.	CLOSED No Student Parking

Normal hours of operation for summer quarter are:

	Monday - Thursday	Friday	Saturday
Lot A	6:30 a.m.-9:30 p.m.	6:30 a.m.-6:00 p.m.	CLOSED
Lot B	CLOSED No Student Parking	Opens at 3:00 p.m. (Free Parking)	Opens at 6:30 a.m. (Free Parking)

Lots E, H, I, K are closed to students.

Parking Fees

Rates for student parking lots:

- \$1.00 (every in/out transaction) when paying with the Tartan Card (funds must be added to the Tartan Card)
- \$2.00 when paying with cash.

Free Shuttle Service

Sinclair typically operates a free shuttle service from the campus to overflow lots at the beginning of fall and winter quarters. Call (937) 512-2518 for details.

Visit www.sinclair.edu/help/map/parking for the most current information.

Library

Building 7, (937) 512-2855

library.sinclair.edu

The Library at Sinclair includes a state-of-the-art facility on the lower level of Buildings 1 through 7 and a complete digital library on the Internet. Renovated in 2006, the new Library offers an exciting mix of student friendly learning and social spaces.

Students will find new computers, laptops, WIFI access, group study rooms, classrooms, Writing Center, Tutoring & Learning Center, individual study spaces, quiet reading room, traditional library collections, online digital information sources, Starbuck's coffee bar, and lounge areas in one convenient location.

State-of-the-art computer resources include general office applications and specialized instructional software. Library and IT computer lab staff provide friendly, expert help in using computers, working with software, and finding information.

Library resources include books and e-books, magazines and newspapers, online articles, digital videos, other media, Internet sites, and much more. All of these resources are purchased with the sole objective of helping Sinclair students complete assignments and become successful learners.

The Sinclair Tartan Card serves as the library card for borrowing books and I.D. password for all of Sinclair's online news and research databases. Students with Internet access at home or work can connect at any time, 24 hours a day, 7 days a week. In addition, because Sinclair belongs to the OhioLINK consortium, students can use their Tartan Cards as library cards at other Ohio college and university libraries.

Library hours:

Monday – Thursday, 7:30 a.m. – 9:30 p.m.

Friday, 7:30 a.m. – 5:00 p.m.

Saturday, 8:00 a.m. – 3:00 p.m.

Summer session and interim hours vary.

Ponnie Kendell Student Activities Center

Where to go to relax

Building 8, Room 8025, (937) 512-2509

The Student Activities Center provides lots of opportunities to get involved outside the classroom. The **Student Activities office serves as a contact point for faculty, staff, student organizations, and community groups to schedule activities or to use the Student Center.**

Located in the lower level of Building 8, the center includes:

- Entertainment area
- Game room
- **Sports Café**
- Conference rooms for student organizations
- Area for dances, programs and service work.

Take part in activities such as:

- Competitive games
- Tournaments
- Annual cultural events
- Leadership development training programs
- Success seminars
- Educational workshops.

Be sure to check out the full range of **scheduled activities** and services information offered throughout the quarter at www.sinclair.edu/stservices/sact. Through the center, students can take part in workshops, retreats and classes, and get to know other students, faculty and staff.

Student Activities Center hours during the quarter:

Monday - Thursday, 7:30 a.m. - 10:00 p.m.

Friday, 7:30 a.m. - 5:00 p.m.

Saturday, 8:00 a.m. - 5:00 p.m.

Other hours based on scheduled events.

Tartan Sports Café Hours:

Monday - Thursday, 7:30 a.m. - 7:00 p.m.

Friday, 7:30 a.m. - 2:00 p.m.

Saturday, Sunday, closed.

Summer hours may vary.

Theatre at Sinclair

Blair Hall, Building 2

Entertainment lovers of the Miami Valley have come to know and praise the performances offered by Sinclair students and community members at Blair Hall Theatre (Building 2), the perfect setting for Sinclair Theatre productions, music department concerts, and dance department performances.

Community organizations also use Blair Hall for special events, corporate annual meetings, and a wide range of cultural programs.

To book the theatre, call Corporate & Community Services, (937) 512-3046.

Parking for Blair Hall events is available free of charge after 6:00 p.m. and on weekends at public meters on Fourth Street.

Parking Lot B across the street from Building 2 is also free after 6:00 p.m. on Fridays and Saturdays and all day Sunday.

For weekday matinee performances, patrons must use student and public parking as indicated.

Tartan Campus Store

Building 7, Room 7110, (937) 512-2665 (BOOK)

tartanstore.sinclair.edu

Shop for all your college needs at the Tartan Campus Store, located on the first floor of Building 7 including:

- New **and used** textbooks
- Course supplies
- Official Sinclair clothing
- Postage stamps
- RTA bus passes
- Greeting cards
- Newspapers

Avoid the lines

Ordering online is the convenient way to get all your course materials and Sinclair insignia items. It's the smart way to shop! Simply go to tartanstore.sinclair.edu. Getting what you need has never been easier.

The beginning date for **buying course materials and supplies** is posted each quarter in the quarterly schedule and online at tartanstore.sinclair.edu.

To get a **refund** for textbooks bought on or after this date, just return them in clean and resalable condition, within 30 days from the start of the quarter for which they were purchased. **Return dates** vary during summer and mini-terms. Return textbooks bought any other time and all other merchandise within 30 days of purchase. Complete return information is provided with the sales receipt and on the Tartan Campus Store's web site. **For all returns or exchanges, remember to present the right cash register receipt.**

Cash, check, financial aid funding, MasterCard, VISA and the **Tartan Card** are accepted.

Get **extra cash** by selling back used textbooks during regular Tartan Campus Store hours throughout the year.

Special extended hours are announced for the first week of classes. Hours of operation during summer term and when classes are not in session will be posted in the Tartan Campus Store and on the Campus Store's web site.

Hours (when classes are in session):

Monday – Thursday, 8:30 a.m. – 7:00 p.m.

Friday, 8:30 a.m. – 4:30 p.m.

Saturday, 8:30 a.m. – 12:30 p.m.

Food Services

Food Services

Just about wherever students go around campus, they can fuel up for classes.

Starbucks in the Library!

Stop by for your favorite Lattes, Cappuccino, Frappuccino or freshly brewed coffee.

Campus vending services are available throughout campus. A wide variety of treats include freshly brewed coffee by the cup, health conscious snacks, canned and bottled beverages.

*NOTE: Summer hours for these facilities may vary.

Tartan Marketplace

Building 7,
Lower Level

Hours*	
Monday - Thursday	7:00 a.m. - 8:00 p.m.
Friday	7:00 a.m. - 2:30 p.m.
Saturday	7:30 a.m. - 2:00 p.m.

Check out the Chef's Table for hot meals cooked to order; Italian Oven for freshly baked pizza; Corner Bakery for freshly baked muffins and Danish; Green Pickle Deli for made-to-order sandwiches and wraps; Salad Garden for fresh salads; and Fireside Grill for cheese steaks and burgers.

Tartan Sports Café

Building 8,
Lower Level

Hours*	
Monday - Thursday	7:30 a.m. - 7:00 p.m.
Friday	7:30 a.m. - 2:00 p.m.
Saturday	Closed

Skyline chili, Ben & Jerry's ice cream, freshly baked pizza, fruit smoothies, prepared salads and assorted beverages.

Tartan Subshop

Building 3,
Third Floor

Hours*	
Monday - Thursday	7:30 a.m. - 8:00 p.m.
Friday	7:30 a.m. - 2:00 p.m.
Saturday	Closed

The "new" Tartan Subshop serves hot sandwiches daily. Made to order deli sandwiches, fresh soups, hot dogs, salads, and assorted beverages.

Tartan Pizza Cart

Building 2 & 10,
Walkway
Third Floor

Hours*	
Monday - Thursday	7:30 a.m. - 8:00 p.m.
Friday	7:30 a.m. - 2:00 p.m.
Saturday	Closed

Freshly baked pizza, hot dogs, prepared salads, snacks, and assorted beverages.

Snack Bar

Building 13,
Fourth Floor

Hours*	
Monday - Thursday	7:30 a.m. - 8:00 p.m.
Friday	7:30 a.m. - 2:00 p.m.
Saturday	Closed

Pizza, deli sandwiches, hot entrées, prepared salads and assorted beverages.

Espresso Cafe

Building 11,
Third Floor

Hours*	
Monday - Thursday	7:30 a.m. - 6:00 p.m.
Friday	7:30 a.m. - 2:00 p.m.
Saturday	Closed

Speciality coffee blends, cappuccino, lattes, box lunches and breakfast pastries.

PAC for Good Health

Physical Activity Center (PAC), Building 8

Whatever the age, or fitness goals, students will find a welcoming haven for both body and spirit at the PAC. Its multi-level impressive facilities include:

- Six-lane swimming pool
- Diving well
- Gymnasium
- Aerobics
- Self defense
- T'ai Chi
- Yoga room
- Pilates room
- Weight room with cardiovascular machines
- Free-weight area
- Selectorized resistance equipment.

In addition, a multipurpose fieldhouse features a 1/9 mile running track; tennis, and badminton courts; indoor group cycling area; and a netting system for golf classes.

There are also fully equipped men's and women's locker facilities with amenities, a sports medicine training room and athletic locker rooms. Sinclair students, faculty, staff and alumni can enjoy open times or sign up for a quarter long class.

Wellness & Performance Lab

Building 8, Room 8L13, (937) 512-2860

Through the Wellness & Performance Lab, the Physical Education department and Dietetics & Nutritional Management department offer a menu of assessment services, carried out by students under close faculty supervision. Services include body composition analysis, nutrition analysis and nutrition assessment follow-up sessions. These services are offered at a modest cost to Sinclair faculty, staff and students as well as to members of the community. To learn more about these services, contact the Physical Education department or the Dietetics & Nutritional Management department.

Take a Break in a Lounge

For a place to rest or a quiet place to talk, try one of the lounges located on the first floor of most buildings. And, please—in order to keep lounges nice for everybody, drinks in disposable containers are okay, but no food, player/recorders, or televisions are permitted in the lounges. Smoking is not permitted in the lounges or in any campus building.

Computers on Campus

I.T. Computer Labs

The Teleports and the CIL labs are computer labs which are managed by the I.T. division. These labs provide first-class support for Sinclair students, faculty and staff in the use of Information Technology. The I.T. Computer Labs are state-of-the-art computer facilities with convenient access to high quality computers, printers, scanners, CD-RW's and copiers.

Other equipment that is available includes plotters, Macintoshes, video editing equipment and a fax machine for local use in Teleport II. There are always lab assistants in the I.T. Computer Labs to help students with their learning objectives.

I.T. Computer Lab workstations are high end P.C.'s that have the Sinclair academic workstation image which includes: Windows XP Operating System, Microsoft Office 2003, Internet Explorer, Library CD-ROM access, access to clip art on the network server, Telnet, Adobe Acrobat Reader and virus protection software.

I.T. Computer Labs also provide access to over 170 division specific software applications. A Tartan Card is required to access I.T. Computer Lab resources.

Locations and Hours:

Teleport I, Building 7, Library, Lower Level , (937) 512-2002

Teleport II, Building 13, Second Floor, Room 13223, (937) 512-5394

Monday – Thursday	8:00 a.m. - 9:30 p.m.
Friday	8:00 a.m. - 4:00 p.m.
Saturday	9:00 a.m. - 4:00 p.m. (Teleport I closed summer)
Sunday	12:30 p.m. - 6:30 p.m. (Teleport II only, closed summer)

CIL, Building 14, First Floor, Room 14109, (937) 512-5079

Monday – Thursday	7:00 a.m. - 9:30 p.m.
Friday	7:00 a.m. - 5:00 p.m.
Saturday	9:00 a.m. - 4:00 p.m. (Closed summer)
Sunday	Closed

I.T. Computer Labs are opened between quarters. Hours will vary during the interim and summer quarter. Hours of operation are posted in each lab and on the lab web site.

For more information on specific hardware, software, services and resources visit I.T. Labs at www.sinclair.edu/technology/labs/ITlabs.

Academic Resource Center (ARC)

Building 13, Room 13105, (937) 512-3495

An ARC instruction facilitator will assess skill levels and guide students to help improve math, English and reading skills.

See page 67 for details.

David H. Ponitz Sinclair Center

Building 12, (937) 512-3061

Sinclair Center provides a creative, state-of-the-art, training environment for the Miami Valley, along with the crucial support facilities and services essential for successful learning. Sinclair Center is the only conference center in the Dayton area certified by the International Association of Conference Centers of North America (IACC).

The center combines world-class technology with the proactive programs, innovative faculty, and comprehensive facilities of Sinclair. An incredible array of features can be tailored to meet any adult learning and training needs:

- A full-time registration staff helps coordinate activities and record keeping.
- A 350-car parking garage (Lot C) underneath Sinclair Center means complete shelter from inclement weather.
- Any required audio-visual equipment is already available or will be secured.
- Allied health/science laboratories occupy the center's third floor and are available for special presentations or training.
- Seminar rooms can accommodate five to 300 participants. Groups as large as 500 can meet or dine in the great hall.
- Complete catering services from gourmet meals to business lunches to morning and afternoon breaks are available.
- Using the latest equipment, video and electronic programming can reach meeting rooms throughout the building.
- Each seminar room can be linked electronically with computers in remote locations on or off campus, and is equipped for microwave television distribution. National teleconferences can be received through the center's satellite receiving equipment.

Testing Center

Building 10, Room 10445, (937) 512-3076

The Testing Center, in addition to placement testing, provides academic testing for students collegewide. The Tartan Card or an Ohio driver's license is required for academic testing.

Students may call the Testing Center at (937) 512-3076 to verify that their exam is on file and ready to be administered. Children are not permitted in the center and may not be left unattended in the lobby.

Academic Testing Hours of Operation*:

Day(s)	Open	First Test Given	Last Test Given	Close
Mon. - Thurs.	8:00 a.m.	9:00 a.m.	7:00 p.m.	8:00 p.m.
Friday	8:00 a.m.	9:00 a.m.	3:00 p.m.	4:00 p.m.
Saturday	9:00 a.m.	9:00 a.m.	1:00 p.m.	2:00 p.m.

* No Saturday hours during summer quarter and interim breaks.

Placement Testing Hours of Operation*

Please arrive at least two hours prior to closing for placement testing.

Day(s)	Open	Close
Mon. - Thurs.	8:00 a.m.	8:00 p.m.
Friday	8:00 a.m.	4:00 p.m.
Saturday	9:00 a.m.	2:00 p.m.

* No Saturday hours during summer quarter and interim break.

I.T. Help Desk

(937) 512-4357 (HELP), (866) 781-4357 (HELP)

The Information Technology Help Desk provides students, faculty and staff with a single primary point of contact for technology related issues.

Assistance is available over the phone at (937) 512-4357 (HELP) or toll free (866) 781-4357 (HELP), or via the Help Desk Assistance form found at www.sinclair.edu/helpdesk.

The Help Desk analysts are trained to help students with their questions about the supported software listed below. They will not be expected to answer questions about non-supported software or commercial online services (AOL, FastNet, etc).

Help Desk analysts do not have the resources to setup or repair personal computers, install personal software, nor can they assist with computer programming.

Supported Software and Services:

- Student E-mail Account
- InTouch Kiosk Information System
- my.Sinclair.edu - Portal
- Online Continuing Education
- Personnel Identification Number (PIN) Reset
- Portal
- Web Advisor
- WebCT

For more information about Help Desk hours and services students can log onto www.sinclair.edu/helpdesk.

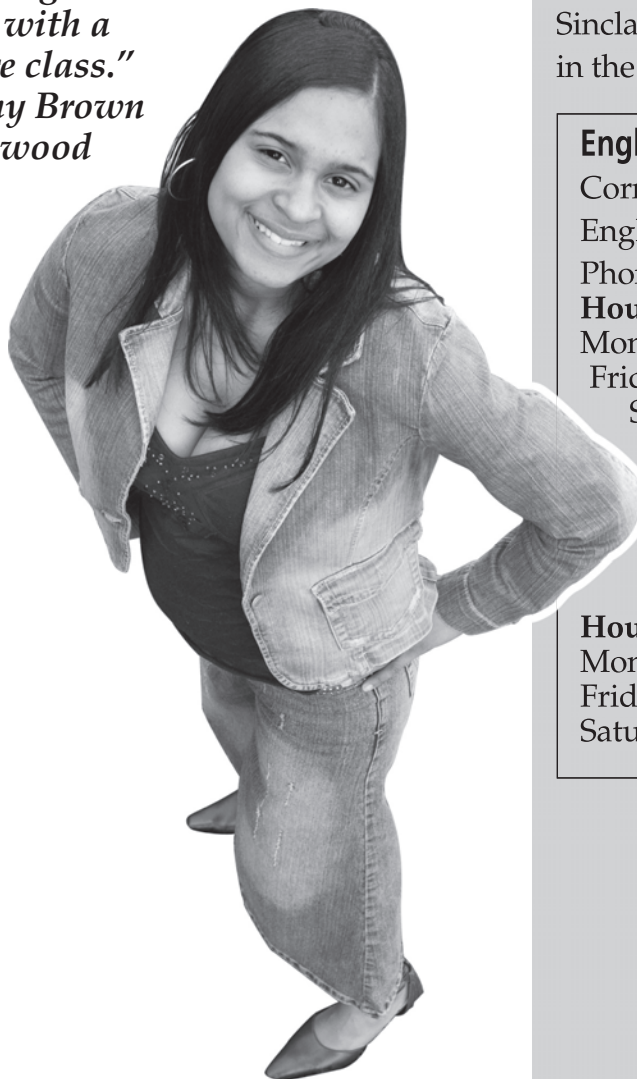
Regional Centers

Sinclair's Expanding Opportunities

Whether you are a full-time student starting college or an adult looking to begin a new career, the Learning Centers provide a pathway of courses to achieve your goals. If you're looking for a career in health care, business, technology, transferring to a four-year school, or career development, we've got a pathway for you.

"I plan on majoring in nursing. I am beginning with a health care class."

—Brittany Brown
Englewood



Learning Centers

Going to college just got easier for regional residents. Every minute counts, and convenience is key. Sinclair understands, so that's why Sinclair is bringing college to you.

At the Learning Centers, students can start when they are ready. With five-week and 11-week terms, two-week mini sessions, weekend classes, and day and evening sessions, students can arrange a schedule that works with their lives.

Englewood and Huber Heights Learning Centers

Sinclair is bringing the same high quality classes and services expected from the downtown Dayton campus to two new learning centers in Englewood and Huber Heights. Located next to the YMCAs in each community, these learning centers provide Sinclair's award winning academics and services in the convenience of their own neighborhoods.

Englewood Learning Center

Corner of Hoke Road and State Route 40 in Englewood next to the Kleptz YMCA.

Phone (937) 836-8750

Hours:

Monday – Thursday, 8:00 a.m. - 7:00 p.m.

Friday, 8:00 a.m. - 5:00 p.m.

Saturday, 8:00 a.m. - 12:00 noon

Huber Heights Learning Center

Shull Road next to the Huber Heights YMCA.

Phone (937) 512-5800

Hours:

Monday – Thursday, 8:00 a.m. - 7:00 p.m.

Friday, 8:00 a.m. - 5:00 p.m.

Saturday, 8:00 a.m. - 12:00 noon

Each Learning Center Includes:

- Approximately 15,300 square feet of space with eight classrooms and one computer classroom
- An "Information Commons" combining library services function and open computer lab
- Small Tartan Campus Store, a cashier for tuition and fee payments, and lounge area
- Offices for private academic and personal counseling

The Learning Centers also provide student services in outreach recruitment, admissions and registration, financial aid information, academic advising and counseling, and computer lab services. Students attending these learning centers will not have to drive to the downtown Dayton campus to fulfill their student needs.

For more information on the Englewood or Huber Heights Learning Centers, visit their web sites at learningcenters.sinclair.edu.

Warren County

In 2005 the Governor of Ohio signed into law a provision that made Sinclair Community College the official community college of Warren County. For the first time in the history of Sinclair, the college has been granted the rights and responsibilities to provide direct educational services to the citizens of both Warren and Montgomery Counties. For the citizens of Warren County, they now have a community college that officially serves their county, and that college is Sinclair.

Although Sinclair has been offering its award winning academics and student services in Warren County for years, 2006-2007 will bring a significant change in the way Sinclair serves Warren County citizens. During the 2006-2007 academic year, the college will open a learning center in Warren County, offering students the pathways needed to eventually complete an Associate of Arts (A.A.) degree. The A.A. degree pathway will allow students to pursue the entire A.A. degree, obtain the general education courses needed for other degree pathways, or for students interested in university parallel courses.

The Warren County Learning Center will provide day, evening, and weekend courses and will provide on-site student services such as outreach recruitment, admissions, registration, financial aid, student advising, and computer lab services. Warren County students will be able to fulfill their student needs at the Warren County Learning Center without needing to drive to Sinclair's Dayton campus.

The Warren County Learning Center will over the years evolve into a full-scale Sinclair comprehensive community college campus located in Warren County.

Learning Center

Miami Valley Research Park

1900 Founders Drive, (937) 252-9787

The Learning Center at Miami Valley Research Park provides comprehensive tools and resources to support work force training and development, including:

- Four computer labs designed for high-end technical training, each capable of holding 16 students and containing leading edge equipment and instructional environments.
- One seminar room for small training programs or breakout sessions.
- Interactive videoconferencing capable of delivering point-to-point or multi-point distance learning instruction or training.

The Learning Center offers open enrollment and customized training solutions to Dayton corporations in an array of topics, including network security, programming, web development, supervision and management, and customer service. The Learning Center is also a SkillsMAX/ACT certified center delivering IT certification tests, online courses, and database management services.

Distance Learning Opportunities

(937) 512-2990, 1-888-226-2457

Building 14, Room 14223

www.sinclair.edu/distance

Distance learning is a good alternative for motivated students who prefer flexible scheduling. Distance learning course content is the same as regular, on-campus courses and meets all program and transfer requirements. Distance learning courses also have the same low tuition rates and high-quality instructors as traditional classes.

There are two types of distance learning courses:

- Those that students take on their own, using alternative delivery formats
- Those that are taught in a classroom at the off-campus locations at specific times and days.

Taking courses in a distance learning format is a viable option for students who may have scheduling conflicts; work or family commitments; those who are homebound or live a distance from campus; or those who would rather study alone.

Students register for any distance learning course in the same manner they register for other Sinclair courses:

Telephone, online, or in-person registration.

The cost for distance learning courses is the same as for other for credit courses and all course work must be completed within the quarter it is taken and as outlined in the course syllabus.

Distance learning courses are equivalent to their classroom counterparts in credit hours, transferability to other institutions, and fulfilling many degree program requirements. Distance learning courses encompass a broad range of disciplines across the college's curriculum.

See Distance Learning chapter, page 153.

www.sinclair.edu
my.Sinclair.edu

Services for Students

Mission

We create access to academic support service, programs and resources that proactively and collaboratively guide, assist, and help students achieve their personal learning goals in a success oriented, learning college environment.



"Sinclair proved to be the most inexpensive, most convenient, and I already had friends here."

*—Derek Brown
Warren County*

Academic Resource Center (ARC)

Building 13, Room 13105, (937) 512-3495

Thinking about coming back to college? Math skills seem a little rusty? Forgot the writing skills you learned in high school? Or just need a little refresher on math, English and reading? The Academic Resource Center (ARC) is for you!

The on-campus ARC is located in Building 13 on the second floor in 13105. An ARC instructor-facilitator will assess skill levels and guide students through a self-paced tutorial to help improve math, English and reading skills either before taking the placement test or enrolling in remedial courses. It's easy and it's free.

Hours: Monday - Thursday, 10:00 a.m. - 7:00 p.m.

Friday, 10:00 a.m. - 4:00 p.m.

Saturday, 9:00 a.m. - 1:00 p.m.

Closed during the summer on Saturday

In addition, there are ARC's at several Montgomery County high schools with the goal to expand to all high schools in the county. Students in eleventh and twelfth grades have the opportunity to assess their basic skill level and if help in the area of basic skills is needed, go through the self-paced tutorials and bring their skills up to college level by high school graduation.

Alumni Affairs

Building 15, Room 15104, (937) 512-2510

The Alumni Affairs office:

- Develops and maintains relationships with all Sinclair alumni through social, service, and professional networking opportunities
- Creates and manages benefits for all alumni
- Communicates with alumni through mailings, periodic publications, email, and on the web
- Maintains data on more than 30,000 Sinclair alumni.

Alumni Association

Upon graduation, alumni receive a one-year, complimentary membership to the Sinclair Alumni Association. Members receive many benefits, including:

- Access to college facilities (certain limitations apply)
- Eligibility to run for a seat on the 15-member council
- Volunteer opportunities at association sponsored events and activities.

Proceeds from activities support the association's scholarship program. Dues are \$20 per year, or \$100 for a lifetime membership.

Campus Ministry

Building 10, Room 10317, (937) 512-2768

The Campus Ministry Center, staffed by Roman Catholic and Protestant campus ministers, provides such services as:

- Personal and crisis counseling
- Programming for spiritual growth
- Guest lectures, discussion groups, support groups, Bible studies, workshops, retreats and spiritual direction

Campus Police

Building 7, Room 7112, (937) 512-2700

www.sinclair.edu/departments/police

Sinclair takes pride in its safety record and is committed to maintaining a safe environment. On the Sinclair campus, students can enjoy all the advantages of an urban college, plus peace of mind in a beautiful, contained academic setting.

To reduce crime and ensure the campus community is safe and secure, the Sinclair Campus Police department employs 21 sworn police officers, security officers in Buildings 9, 12, 13, 14, 19, 20, Library, plus officers on each level of the garage and perimeter parking lots. All these officers provide visible police presence to prevent crime.

Information related to crimes committed on campus, crimes committed on adjacent streets and crimes committed at off-campus locations can be viewed at www.sinclair.edu/departments/campuspolice. The past three years of crimes are noted, plus there is a "tip" line available if any student has a need to report issues anonymously. Also listed are the services provided by Campus Police.

Students, faculty, staff and visitors are expected to promptly and accurately report any crime or incident that negatively affects the college to Campus Police, Building 7, Room 7112, or call (937) 512-2700.

To deter crime and make themselves available, police patrol the campus and its parking lots on a regular basis. **Students should keep personal items with them at all times. Theft of unattended items is the most common crime on campus. For additional information concerning safety and the safety of belongings, contact the Sinclair Campus Police.**

Campus Police also provide **escorts** to the parking lots. Sinclair urges students to travel with care and avoid walking alone.

The **Lost & Found** is located in the Campus Police office, Room 7112.

Emergency Telephones/Intercoms

Emergency telephones and elevator intercoms are in the following campus locations:

- Third floor of buildings 1-6, 10, 11
- Basement level of Buildings 1,2,3,4,5,6
- First floor of Building 11
- North and south stairwells, Building 12 (all floors), and stairwells in buildings 13, 14, 20.
- Each elevator in all buildings

When using an intercom, press the red button and the intercom will automatically connect to the Campus Police.

Additionally, an emergency **blue light system is installed in several outside areas:**

- Parking Garage A (all stairwells)
- Parking areas (B, C, D, E, H, I, K, L, M)
- First floor levels of Buildings 1, 9, 10, 13, 14, 15, 16, 19, 20
- First floor level between Buildings 3 and 4

Blue lights on top of poles mark the outside blue lights, including those in the parking garage. To receive emergency assistance, simply press the red button and the system will provide direct contact with Campus Police.

Everyone is encouraged to become familiar with each emergency telephone/intercom location on campus.

Career Services

Building 10, Room 10315, (937) 512-2772

Career Development Services

Use Career Services to help make the most of your education, talents, interests and experiences. The experienced, dedicated staff can help determine short and long term goals, select a college academic program, and/or change career fields. Receive assistance individually or in groups, and check out the variety of workshops, given each quarter, focused on career decision making, and job readiness skills.

Services include:

- Computerized and online career assessments that provide inventories of interests, abilities, preferences and values
- Career counseling
- Assistance with matching career fields with Sinclair academic programs
- Quick reference guide of salary information that corresponds to Sinclair academic programs
- Access to alumni who share information about their careers
- Extensive career library materials
- Computerized and online information systems that contain Ohio job market data
- Online scholarship and financial aid information for students planning to transfer and/or continue their education
- On-campus student employment postings online and in house.

Job Seeker's Training

If finding full-time employment is a top priority, take advantage of the Job Seeker's Training program, a free service open to the community. This intensive workshop meets for 2 1/2 hours a week, for seven weeks, and trains students in assertive job seeking techniques. Interviewing, resume development, networking and use of the Internet for job searching are just a few of the program's services.

Joblink Online Employment Management System

By using the Internet to access this online employment system, students can:

- Register for Employment Services.
- Post a resume to the Career Services graduate database web site.
- Review current job opportunities and future interview schedules.

Once students are eligible and are registered with the system, the computer can match them by academic programs and/or skills to available job opportunities, and refer their resume to employers for consideration.

Additional Services

- On-Campus Recruitment
- Resume Critiquing
- Employer Library
- Employment Counseling
- Full-time, part-time, and temporary job postings
- Allied Health Job Fair
- Career Exploration Fair
- Virtual Career Fair
- Career Opportunity Corner
- Lists of employers by academic programs

Employment Services

Students who are going to graduate within three quarters, or who are a Sinclair graduate or alumnus, can use the college's placement services. Those who are planning to graduate from Sinclair and have accumulated 75 credit hours toward an associate degree or have completed a one-year certificate need to register for Employment Services Orientation. Alumni are encouraged to register with the Alumni Association before registering with Career Services.

Child Care

Early Childhood Education Centers

Building 9, Room 9101, (937) 512-2234

Students who need child care services while on campus should call the Early Childhood Education Centers, a component of the Child & Family Education department which is owned and operated by Sinclair. The centers are licensed by the Ohio Department of Human Services and accredited by the National Association for the Education of Young Children.

The philosophy of the learning environment supports developmentally appropriate practices and child centered activities. Early Childhood degreed teachers and practicum students facilitate children's cognitive activities, social, physical and emotional growth. The children served are three, four and five years of age.

Two centers are available at reasonable rates: The **Early Childhood Learning Center**, a full-time program, and the **Flex-Time Center**, a part-time program.

For more information about the programs and fee structures, contact the Early Childhood Education Centers at (937) 512-2234. Tuition assistance is available for eligible students. Child care tuition payments are made at the Bursar's office (Building 10, Second Floor).

Child & Family Education Laboratories

Language Lab/Computer Lab, Building 9, Room 9108, (937) 512-2787

Resource Library, Building 9, Room 9223, (937) 512-2787

Computer Classroom, Building 9, Room 9311, (937) 512-8177

Students may use a wide variety of resources and materials in the following areas:

- Early Childhood Education
- American Sign Language
- Interpreting for the Deaf
- Disabilities Intervention Services
- Infant Toddler Education

Other services include a toy lending library, materials production lab (including laminating), an audiovisual library, instructional computing centers, and a sign language lab.

Counseling Services

Building 10, Room 10324, (937) 512-2752

Students interested in addressing challenges that may affect their ability to successfully progress within the Sinclair Community College setting, may contact Counseling Services for:

- Individual counseling about educational, personal or social concerns
- Individual Learning Plans and Counseling Action Plans for new and current students
- Educational information and skill development in areas, such as problem solving, time management, stress management, study skills, managing emotions and moods, career decisions, interpersonal relationships, and life management skills
- Resource information on alcohol/drug awareness, health education and holistic well being
- Comprehensive community referrals to off-campus agencies for additional assistance

All counseling services are free, confidential and available by appointment or walk-in basis.

Hours: Monday-Thursday, 8:00 a.m. - 7:00 p.m.

Friday, 8:00 a.m. - 5:00 p.m.; Summer until 4:30 p.m.

African-American Male Initiative (AAMI)

Counseling Services, Building 10, Room 10324, (937) 512-2752

The African-American Male Initiative (AAMI) is designed to assist and support African-American male students as they make their transition into the mainstream of college life. Counseling Services helps men in the AAMI attain their educational goals.

AAMI provides a nurturing, supportive environment and mentoring to help students build self-esteem and gain self-confidence. Students may participate in activities to teach them basic interpersonal skills and necessary employment survival skills. Students are provided a Counseling Action Plan to guide their progress.

AAMI men may be involved in individual counseling, group activities and mentoring opportunities.

Eligibility Requirements for AAMI include:

- Willingness to follow an Individual Learning Plan or Counseling Action Plan.
- Willingness to participate in planned quarterly activities
- Make satisfactory academic progress each quarter in DEC classes below 100 level.
- Recommended 2.0 quarterly grade point average or cumulative grade point average upon completion of the first quarter in the program.

Disability Services

Building 10, Room 10421, (937) 512-5113 or 512-3096 (TTY)

For students with a disability, Sinclair wants to provide the means to help develop potential.

This includes support and guidance for successfully completing college for students with a mental or emotional disorder. Services include college orientation, walk-in support, problem solving, development of peer relationships, educational survival skills and connection with collegewide resources. If students believe their academic success is being hindered by an emotional complication, they can drop by to discuss concerns.

Early identification is required to ensure timely provision of materials and services. In order to gain early access to the appropriate services, necessary materials and information regarding program requirements, contact the office of Disability Services at least eight weeks before the initial quarter of attendance.

Available Services

- Interpreters
- Notetakers
- Readers/Writers
- Testing Accommodations
- Textbook Alternatives
- Tutors

Adaptive Aids

- ADA computer stations campuswide
- Assistive listening devices
- Braille translation and embossing
- Closed circuit TV for magnification
- Closed captioning
- Computer screen enlargement
- Screen readers
- Voice recognition

These services are provided within the framework of the college. Disability Services is an informational and resource center to ensure mainstreaming. **Students request and receive services on a voluntary basis.**

Once registered with Disability Services and approved for services, students should contact this office at least two weeks before each quarter begins. At the beginning of each quarter, students are also responsible for informing instructors of any instructional accommodations and/or special learning needs.

Hours: Monday - Thursday, 8:00 a.m. - 7:00 p.m.

Friday, 8:00 a.m. - 5:00 p.m.

Summer hours will vary.

Health Insurance Portability and Accountability Act of 1996 (HIPAA)

Students may be required to provide medical or psychological records in order to document and receive specialized services. These records are protected under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) until they are provided to Sinclair Community College. At that point they become educational records under the protection of the Family Educational Rights and Privacy Act of 1974 (FERPA). Both these acts have strict rules to protect personal confidential information.

English as a Second Language (ESL)

Building 10, Room 10421, (937) 512-5113

Those students whose second language is English should make an appointment to see the ESL program coordinator. Students will receive application, registration and counseling help.

Hours: Monday - 10:00 a.m. - 7:00 p.m.

Tuesday - Friday, 8:00 a.m. - 5:00 p.m.

Summer hours will vary.

Enrichment Center

Building 12, Room 12331, (937) 512-5188

www.sinclair.edu/enrichment

The Enrichment Center offers learning opportunities for pre-college students. The academic, social and cultural readiness activities of enrichment programs support the academic goals of participating students and give them an early college experience. Students interested in Quick Start, Upward Bound, or Young Scholars, should contact their school counselor. Students also may contact the Enrichment Center at the college for more information, by calling (937) 512-5188.

Quick Start – Grades 11 and 12

Building 12, Room 12331, (937) 512-5188

This pre-college program offers college courses in technical academic areas to juniors and seniors enrolled in career-technical education programs at participating high schools. Quick Start gives students an opportunity to experience college life while pursuing their educational goals.

Upward Bound – Grades 9-12

Building 12, Room 12382, (937) 512-2331

A federally funded pre-college program for low income and/or first generation students, Upward Bound is designed to increase the probability that participants will complete their high school education, enroll and graduate from college. Upward Bound provides several cultural trips, supplemental education, ACT/SAT review, a six-week summer program each year of participation.

Young Scholars Program – Grades 8-12

Building 12, Room 12331, (937) 512-3730

The Young Scholars Program (YSP) is a five-year pre-college program designed to help first generation Montgomery County youths become academically and socially prepared to graduate from high school and prepared to enter college. YSP targets academic middle students with grade point averages between 2.0 and 3.0. Selected students attend ten, three and a half hour Saturday sessions guided by a five-year curriculum, aligned with Ohio Graduation Test outcomes.

Experienced Worker Program

Building 10, Room 10315, (937) 512-5347

Designed for workers who are unemployed or displaced. Eligibility is based on age and income, and participants must be **residents of Montgomery County**.

This work force training program offers:

- Assessment of current skills
- Employment counseling to implement a clear, attainable career goal
- Identification of short term training opportunities
- Short term skills training
- Development of career pathways and job seeking skills to ensure successful employment outcomes
- Referrals to employers

Hours: Monday - Friday, 8:00 a.m. - 5:00 p.m.

Financial Aid & Scholarships

See page 33.

Health Insurance

Counseling Services

Building 10, Room 10324, (937) 512-2752

While Sinclair does not provide health care insurance, information is available on a health insurance plan that is provided to both full-time (12 or more credit hours) and part-time students (at least 9 credit hours) at special rates.

FI International students must purchase different insurance. FI insurance information is available Registration & Student Records, Building 10, Room 10231.

Health Services

Sinclair provides only emergency care in the form of first aid for those who become ill or are injured while on campus. Sinclair Campus Police officers are trained in emergency first aid and Cardiopulmonary Resuscitation (CPR) and are able to handle emergency situations.

First-aid kits are located in the following areas:

Room	Room	Room	Room	Room
1012	3033	4320	10112	11141
1015	3112	5021	10244	11426
1023	3122	5030		Auto Lab
1030	3134	5141	10324	Mail Center
1123	4001	6022	10411	Bookstore
1143	4012	6040		Library
2220	4224	7112		Bldg. 12
3013	4232	8026		13307
3021	4241	9106		13420
3023	4311	10001		16106

Note: For additional attention, please contact Sinclair Campus Police, Room 7112, (937) 512-2534.

Dental Hygiene Clinic

Building 4, Room 4332, (937) 512-2548

Students may have their teeth cleaned and help a fellow student complete degree requirements at the same time—for only \$10.00.

The clinic is open Monday, Wednesday and Friday. Appointments are scheduled at 8:00 a.m. or 1:00 p.m. Please call for an appointment.

Living Accommodations

Sinclair does not provide housing facilities for students. However, dormitory housing is available for women at the Central YWCA, 141 West Third Street, only two blocks from the Sinclair campus.

For assistance with information about basic housing and apartment search, contact the Student Activities office, Building 8, Room 8025, (937) 512-2509.

Library

See page 60.

Military Services

Building 10, Room 10324, (937) 512-2586

The Army Reserve Officer Training Corps (ROTC) program is designed to provide the Army, Army Reserve and National Guard with commissioned officers. The program helps students:

- Develop decision making capabilities through detailed examination of leadership
- Expand oral and written communication skills
- Provide technical training in basic military skills
- Develop an understanding of the relationship between the basic degree field and its application in the United States Army

Full-time students at Sinclair can:

- Enroll in Army ROTC and participate without obligation in the first two years of the four-year program
- Complete the final two years at another institution, OR
- Apply for advance placement and participate in only the final two years of ROTC, receiving commission as a second lieutenant upon graduation from Sinclair
- Join the Air Force Reserve Officer Training Corps (AF-ROTC) at Wright State University

The Southwestern Ohio Council for Higher Education (SOCHE) conducts registration through Sinclair's office of Registration & Student Records, Second Floor, Building 10. For further information contact:

Army ROTC	University of Dayton	(937) 229-3326
	Wright State University	(937) 775-2763
Air Force ROTC	Wright State University	(937) 775-2730

Ombudsman/Student Advocate

(937) 512-2205, Building 10, Room 10424

The Ombudsman/Student Advocate provides assistance to the students who indicate they have problems/issues or concerns that need resolution. It may involve:

- Conflict resolution
- Coaching - advocacy/support

The Ombudsman can:

- Cut red tape
- Listen to problems
- Investigate, mediate, facilitate
- Clarify policies and procedures

Physical Activity Center (PAC)

See page 76.

Registration & Student Records

See page 29.

Sinclair Central

See page 32.

Student Activities

See page 76, or go to www.sinclair.edu/stservices/sact/index.cfm. At this site students can access the Code of Conduct and information about SGA.

Student Government

See page 76, or go to www.sinclair.edu/organizations/government/index.cfm.

Student Success Planning Services

Building 10, Room 10424, (937) 512-3032

New degree or certificate seeking students, based on their needs, will be offered the opportunity to develop an Individual Learning Plan (ILP) with an assigned Student Success Services counselor. After completing the placement test, students will receive information about the ILP at the Assessment/Intake Center. The ILP is an action plan that will serve as the new students' personal guide to becoming successful students. The counselor will assist the students with the following:

- Choose a college academic program or career goal
- Develop a plan to pay for educational expenses
- Identify resources and services that will be beneficial
- Review strategies to improve study skills
- Select courses and assist with registration for classes

Students who participate in this process their first quarter will have a customized success plan and support system to serve as a guide as they begin their educational experience at the college and to help them in the completion of their educational goals.

Hours: Monday-Thursday, 8:00 a.m.-7:00 p.m.

Friday, 8:00 a.m.-5:00 p.m.

Student Support Services

Building 11, Room 11342, (937) 512-3550

The Student Support Services (SSS) program is funded by the United States Department of Education to provide intensive services and activities that enhance chances of academic success for Sinclair's first generation and income eligible students. The program also works with the students to promote a comfortable college environment, so they can persist and accomplish their academic and career goals.

At Sinclair, Student Support Services innovates strategies to facilitate these goals. Strategies include, but are not limited to:

- Student Success Action Plan
- Professional tutoring
- Personal, career and financial aid counseling
- Limited textbook and video loan bank
- Transfer information, planning and assistance
- Cultural and educational enrichment activities
- Referral to campus and community services
- Advocacy

Tutorial Services

Library, Building 7, Lower Level, (937) 512-2792

Tutorial Services offers **FREE** individualized educational assistance in most 100 level courses to students enrolled at Sinclair for credit. Tutors, selected on the basis of scholastic ability and interpersonal skills, are available in open **learning laboratories**, on a **scheduled** basis, and in **group supplemental instruction** sessions. Students interested in receiving free tutoring or applying to become a paid tutor, visit the Tutorial office.

Hours: Monday - Thursday, 8:00 a.m. - 8:00 p.m.

Friday, 8:00 a.m. - 5:00 p.m.

Saturday, 10:00 a.m. - 2:00 p.m.

Summer hours will vary.

Veterans Assistance

Building 10, Room 10324, (937) 512-2586

Located in the department of Counseling Services, Veterans Assistance provides assistance regarding V.A. educational benefits for service members, veterans, reservists, National Guard and dependents of veterans.

**Hours: Monday and Thursday, 8:00 a.m. - 7:00 p.m.;
Tuesday, Wednesday, and Friday, 8:00 a.m. - 5:00 p.m.**

Summer hours may vary.

Educational Benefits

Students, who meet the V.A. eligibility criteria may be certified to receive educational benefits by registering with Sinclair's V.A. coordinator. The following chapters currently exist for educational benefits:

- Montgomery GI Bill - Active Duty (Chapter 30)
- Montgomery GI Bill - Selected Reserve/National Guard (Chapter 1606)
- Veterans Educational Assistance Program (VEAP) (Chapter 32)
- Survivor's and Dependents' Educational assistance Program (Chapter 35)
- Vocational Rehabilitation Program (Chapter 31)

Benefits are paid based on chapter and number of credit hours enrolled per quarter:

- Full-time: 12 or more credit hours
- Three-quarter time: 9 to 11 credit hours
- Half-time: 6 to 8 credit hours
- *Less than half-time: 5 credit hours or less (tuition and fees only)

*Chapter 31 Does Not Apply

Students may be certified before classes begin in order to receive an early check to assist in paying registration expenses.

For specific benefit and payment information, contact the Veterans Assistance office.

Repayment of Benefits

Under certain circumstances, withdrawing from courses could mean repayment of V.A. benefits, so veterans should contact the V.A. coordinator before withdrawing. **Non-attendance of classes** could also result in repayment. To eliminate any problems with benefits, each veteran must verify courses with a paid receipt for each term of enrollment. If the benefit recipient receives an "N" grade, a "Z" grade or all "F" grades in one term, benefits will be affected that term or in the future.

Courses and Courses of Study

Students with prior credits who attended previous college(s) or served in the military must request official transcripts. Transcripts will be evaluated by the office of Registration & Student Records, and once the credits have been evaluated the school will send the students a letter informing them of the number of credits accepted. Next, make an appointment with the academic counselor and request a degree audit to be sent to the Veterans Assistance office. The degree audit must be completed by the end of the second quarter or benefits will be suspended or delayed.

Sinclair's Developmental Studies courses are approved for all chapters as long as students have tested into the courses through placement testing.

Two-year associate degree programs qualify for educational benefits. One-year certificate programs do not qualify.

The following is a listing of courses that are **not** approved for V.A. benefits.

1. All certificate (one year) programs
2. **Any course that cannot be credited toward graduation in the degree program**
3. A third attempt at a failed ("F") course.
4. Real estate courses through Dayton Board of Realtors for students not enrolled in Real Estate & Property Management degree program.

Remember: Assistance may be received in course selection, but the **final course selection is the students' responsibility**. Students should follow the course outline as contained in the college catalog and see the academic counselor.

***The regulations vary for Chapter 31 veterans.**

www.sinclair.edu
my.Sinclair.edu

Student Life

Join In - Organizations & Clubs www.sinclair.edu/stservices/sact Building 8, Room 8025, (937) 512-2509

Learning comes in lots of forms—including building relationships. When students join a club they can make friendships and gain experience that will be with them through a lifetime of success.

Just stop by the office of Student Activities/Student Government, Room 8025, Building 8, lower level, to learn more about **leadership development activities, honor societies and clubs related to careers, special interests or activities.**

There are over 40 active clubs/organizations on campus. To learn more about clubs, leadership development activities, or honor societies stop by the office of Student Activities, Room 8025.

"Sinclair's Design program has given me a solid foundation to begin a career as a graphic designer."

—Taj Sibley
Former Clarion designer



Performing Arts

For those who want to act on stage or work behind the scenes, Sinclair's Fine & Performing Arts has something for everyone. The Guest Artist and Lecture Series, and Fine & Performing Arts division, in cooperation with Student Government Association and the Student Activities Advisory Board, offers students a wide variety of events, performances, presentations and activities.

- African-American Gospel Choir
- African-American History Art Show
- Art Faculty Show
- Art Galleries (Library Gallery, Zone VI Gallery, Burnell R. Roberts Triangle Gallery, Hypotenuse Gallery)
- Art Graduation Portfolio Show
- Bluegrass Saturdays
- Chamber Choir
- Classical Guitar Ensemble
- Community Concert Band
 - Concert Handbell Choir
 - Dance Events
 - Design Graduate Show
 - Golden Age Art Show
 - Holocaust Remembrance Program
 - Men's Ensemble
 - Sinclair Community Wind Symphony
 - Sinclair Concert Chorale
- Sinclair Dance Ensemble
- Sinclair Jazz Combo
- Sinclair Jazz Ensemble
- Sinclair Singers
- Sinclair Youth Wind Ensemble
- Student Fine Art Show
- Theatre productions
- Theatre touring productions
- Women's Ensemble

Sports

Building 8, Room 8023, (937) 512-2860

Intercollegiate Sports Sports for All

Sinclair's intercollegiate sports program can give them what they need. Students can choose from four men's intercollegiate teams (basketball, tennis, baseball and golf) and three women's teams (basketball, volleyball and tennis).

As a member of the National Junior College Athletic Association, Sinclair participates with 30 other community colleges in Region XII, which includes a three-state area (Ohio, Michigan and Indiana).

Athletic scholarships are available in all seven sports. Additional information can be obtained by contacting the appropriate coach, (937) 512-2860:

Jeff Price	Men's Basketball
K.C. Gan	Women's Volleyball
Don Cundiff	Golf
Melissa Alexicko	Men's Tennis
Jeff Dillon	Women's Basketball
Michael Goldschmidt	Men's Baseball
Melissa Alexicko	Women's Tennis

Physical Activity Center

Whatever the age, or fitness goals, students will find a welcoming haven for both body and spirit at the PAC. Its multi-level impressive facilities include:

- six-lane swimming pool and diving well
- gymnasium
- aerobic, self defense, T'ai Chi, Yoga and Pilates room
- weight room with cardiovascular machines, free-weight area and a variety of selectorized resistance equipment.

In addition, a multipurpose fieldhouse features a 1/9 mile running track; tennis, and badminton courts; indoor group cycling area; and a netting system for golf classes.

There are also fully equipped men's and women's locker facilities with amenities, a sports medicine training room and athletic locker rooms. Sinclair students, faculty, staff and alumni can enjoy open times or sign up for a quarter long class.

Wellness & Performance Lab

Building 8, Room 8L13, (937) 512-2860

Through the Wellness & Performance Lab, the Physical Education department and Dietetics & Nutritional Management department offer a menu of assessment services, carried out by students under close faculty supervision. Services include body composition analysis, nutrition analysis and nutrition assessment follow-up sessions. These services are offered at a modest cost to Sinclair faculty, staff and students as well as to members of the community. To learn more about these services, contact the Physical Education department or the Dietetics & Nutritional Management department.

Student Activities

Building 8, Room 8025, (937) 512-2509

The department of Student Activities is a vital part of life at Sinclair Community College. Students may choose to participate in a number of activities offered through this office. Programs and services include:

- locker rental
- community resource directory that provides information about off-campus housing
- fax services for students
- copier services for students
- opportunities for students to develop their leadership skills.

For more information contact Student Activities, Building 8, Room 8025.

Student Government Association

Building 8, Room 8025, (937) 512-2509

www.sinclair.edu/organizations/government/index.cfm

The Student Government Association (SGA) serves and represents the needs and desires of the student body, members of the faculty, administration and trustees; and promotes leadership in Student Activities.

Because SGA is an important part of student life, students are automatically members of the association once they are accepted into the college. Sinclair encourages all students to become active members, so that the association really does represent student thought and opinion.

Funded through the Student Activities Advisory Board, the SGA sponsors educational and entertainment activities such as dances, concerts, movies and many other events.

The Student Government executive board members:

- Assist Student Activities in authorizing the chartering of student organizations.
- Approve constitutional or bylaw changes by an organization under the board's jurisdiction.
- Recommend action or policy to the college administration.
- Investigate any matter affecting the student body.
- Plan and present student programs.

To become an active member, students are encouraged to attend the Student Government meetings held biweekly during each academic term. No meetings are scheduled during the summer term. Get information about the Student Government Association, its constitution and information on developing a club or organization in the Student Activities office, Room 8025.

The Clarion

Building 8, Room 8027, (937) 512-2744

clarion@sinclair.edu

Sinclair Community College's student newspaper operates as a public forum for the students of the college and is published weekly during the regular academic year and twice during the summer quarter.

"Dedicated to the Cause of Communication," *The Clarion* is produced by students for students. Students may become involved in reporting, graphic design, layout, photography, and advertising and marketing. Some areas provide students opportunities to earn college credit for their work and be paid as student assistants.

To become involved with *the Clarion*, contact the office at (937) 512-2958 or by e-mail at clarion@sinclair.edu.

Sinclair Ohio Fellows Leadership Program

Building 8, Room 8025, (937) 512-2509

The Sinclair Ohio Fellows Leadership Program is designed to develop the leadership skills of Sinclair students who demonstrate initiative, maturity, intellectual curiosity, social concern, and a genuine desire to grow and lead.

Students may be nominated by a faculty member or may nominate themselves. The program advisory board interviews nominees and then selects students it feels will benefit from, and also contribute to, the program. New students are inducted each quarter.

Upon induction into the program, students are required to:

- Complete a growth contract
- Attend two cultural events per quarter (cost subsidized by the program)
- Attend monthly meetings
- Successfully complete the courses HUM 195, Patterns of Leadership, and HUM 194, Words & Community Issues (fall) (tuition and texts paid for by the program)
- Complete a community internship

The program also includes a mentor component, programs and activities designed to develop leadership skills, service and leadership projects and individual life/career planning.

Leadership Sinclair: Creating Excellent Outcomes (CEO)

Building 8, Room 8025, (937) 512-2509

The Leadership Sinclair CEO program provides participants with an opportunity to learn skills that will develop their leadership potential. The goal of Leadership Sinclair CEO is:

- to teach students the needed skills that will enable them to lead more effectively within the college, community and work place
- to encourage Sinclair students to see leadership as one of their fundamental goals in life
- to pursue leadership with intensity and excellence on a daily basis.

Any student enrolled in at least six (6) credit hours, in good academic standing, and maintaining a 2.0 GPA are eligible for application to Leadership Sinclair.

Students interested in this program should contact the Student Activities office for further information.

Ponnie Kendell Student Activities Center

Building 8, Room 8025, (937) 512-2509
www.sinclair.edu/stservices/sact/index.cfm

The Ponnie Kendell Student Center is the place for students to relax between classes, have a snack, play games, attend special programs and events, meet with club members or relax. A Sports Café, located in the center, offers a variety of choices in food.

The Student Activities academic quarter hours:
 Monday - Friday, 8:00 a.m. - 5:00 p.m.

Summer hours:
 Monday - Friday, 8:00 a.m. - 4:30 p.m.
 Closed Saturday and Sunday

Phi Theta Kappa Honor Society

Building 10, Room 10339, (937) 512-2517

Sinclair students may be able to earn scholastic recognition through membership in Phi Theta Kappa, the honor society for two-year colleges. Sinclair's chapter, Nu Pi, one of the most active student organizations on campus, gives opportunities for **campus and community service, leadership development, and scholarships.**

Phi Theta Kappa members become part of the international organization that offers national scholarships and scholastic development through the honors study topic. To be eligible for membership, students have to have earned 15 academic credit hours or more at Sinclair, with a GPA of 3.5 or higher.

After joining, they receive a Phi Theta Kappa notation on the Sinclair transcript. Members also wear the Phi Theta Kappa gold stole at graduation and have the Phi Theta Kappa gold seal affixed to their diplomas.

Each member must maintain a 3.5 GPA. If the GPA falls below the 3.5 standard, the member will have one quarter to raise the GPA in order to maintain membership. If the student graduates with a GPA below 3.5, the Phi Theta Kappa notation will be removed from the college transcript.

Sinclair Honors Program

Building 10, Room 10339, (937) 512-2517

Highly motivated students who love to learn may find the Sinclair Honors Program is for them. Designed to meet special academic and leadership needs, the program gives students the opportunity to become independent learners through in-depth study of academic disciplines. Those who qualify can participate in one of two ways: Honors Scholars program or individual Honors courses.

The **Honors Scholars** program provides special recognition and scholarship opportunities. Honors scholars are expected to complete five Honors experiences in at least three Liberal Arts & Sciences disciplines, including one Honors Interdisciplinary course, and maintain a grade point average of 3.25 or higher.

Anyone can enroll in **individual Honors** courses, although students with no GPA or a GPA under 3.25 must see the Honors director or counselor for permission. To receive Honors credits, students have to earn an "A" or "B" grade in the course. Earned Honors credit is recorded on their transcript. Students may earn their Honors recognition by successfully completing Honors designated courses, seminars and/or contracts.

For an application form and further information, contact the director of Honors, Room 10339, (937) 512-2517, www.sinclair.edu/departments/honors/.

www.sinclair.edu
my.Sinclair.edu

Degrees & Programs

Whatever students choose to study, they are going to need to complete specific course work and meet certain prerequisites. Be sure to plan the program with an academic counselor or faculty advisor. **Find a complete list of counselors and department chairpersons before each division's listing in this catalog. Feel free to contact them for answers to questions.**

To be successful, students must:

- Determine the transferability of all courses **before** taking classes at Sinclair. **Remember: the transfer school has the final determination of what courses will be accepted for that school's degree requirements.**
- Plan the program **carefully with both a Sinclair academic counselor and an advisor at the transfer school.**

Graduates of a University Parallel program will receive either an Associate of Arts or an Associate of Science degree and will usually be given junior status at the four-year transfer school.

Sinclair has some direct transfer programs with a number of institutions such as Bowling Green State University, Governors State University, The McGregor School at Antioch University, Miami University, Wright State University, University of Dayton, Central State University, and College of Mount St. Joseph.

University Parallel programs are suggested programs of study for those who ultimately plan to major, at a four-year school, in one of the areas listed on the following pages.

Transferability of all courses should be determined BEFORE students begin taking classes at Sinclair. Remember that the transfer school has the final determination of what courses will be accepted for that school's degree requirements.

A Vision for General Education

We believe in unlimited human potential. General Education is a process whereby lifelong learners grow and fulfill that potential. General Education supports individuals in the quest to become whole, complete persons by encouraging development in areas such as thought, communication, values, creativity, feeling, adaptability and awareness. General Education provides foundation skills necessary for successful living in the ever-changing present and future global environment.

In addition to encouraging uniqueness and personal development, General Education provides the commonalities which enable us to collaborate and achieve community. Indeed, as we face the challenges inherent in human existence, General Education is a key to solving the problems of survival for individuals, communities, nations and the species.

General Education

A Definition

According to Sinclair's regional accrediting agency, the Higher Learning Commission of the North Central Association of Colleges and Schools (NCA), General Education consists of "understanding and appreciating diverse cultures, mastering multiple modes of inquiry, effectively analyzing and communicating information, and recognizing the importance of creativity and values to the human spirit." NCA's statement on General Education also adds that these general education elements "allow people to live richer lives," and also are a "foundation for most careers and for the informed exercise of local, national, and international citizenship." The commission expects institutions of higher learning to address these important ends. Finally, in helping to define general education, NCA states, "general education is intended to impart common knowledge and intellectual concepts to students and to develop in them the skills and attitudes that an organization's faculty believes every educated person should possess."

Through Sinclair's courses and programs of study, students acquire breadth of knowledge and gain competence to achieve independent intellectual inquiry. Courses must also stimulate understanding of personal, social, and civic values.

Sinclair Honor Code

The Sinclair Honor Code stems from the General Education competency relating to Values, Citizenship, Community.

As a member of the Sinclair Community College community of students, faculty, and staff, I will uphold the values of citizenship, social-responsibility, and personal accountability. I will maintain the highest standards of professional and academic ethics. I will uphold my personal integrity, dignity, and self-respect by being fair and honest at all times and by treating all individuals with respect. By honoring these ideals, I will be building a better future for myself, my college, and my local, regional, and global communities.

Outcomes

Core Courses in Every Program

In order to determine what courses fulfill the requirements for general education and are applicable the student's degree, he or she should see an academic advisor.

Each degree seeking student must complete a core of approximately 20 quarter hours of courses in the areas of communication, English, social science, humanities, mathematics and computer literacy. In addition to providing educational breadth, these courses support the development of the across-the-curriculum competencies listed on the next page.

These degree programs incorporate a series of courses which introduce and reinforce the competencies across the curriculum. The minimum required courses include:

- At least two courses of **written communication** (selected from one of the following sequences: ENG 111, 112, 113; ENG 131, 132; ENG 121, 122).
- One course of **oral communication** (COM courses).
- One course of **mathematics** (MAT 100 level or higher OR demonstrated proficiency via examination).
- One course of **social science** (PSY, SOC, PLS, HIS, GEO, ECO, SWK, or HUM 115).
- A **computer theory/application course**. This may be a course within the program of study, a module within a course in the program of study, OR a BIS or CIS course.
- One course of **humanities from any on the following lists: Students with limited knowledge of the humanities can select one of the following courses:**
 - **HUM 130** **Humanity & the Challenge of Technology**
 - **HUM 131** **The Search for Utopia**
 - **HUM/EGR 132** **Connecting Technology & Our Lives**

Students who have an understanding of, and an appreciation for, the humanities and wish to study one aspect of the humanities can select one of the following courses:

- ART 101 • HIS 105 • MUS 115
- ART 102 • HIS 111, 112, 113 • PHI 205
- ART 125 • HUM 125 • REL 111
- ART 235 • HUM 141 • REL 112
- DAN 155 • HUM 205 • REL 135
- DAN 157 • HUM 245 • THE 105
- GEO 102 • HUM 255

Students with a fairly substantial background in a discipline can select a course from the following which are designed for academic programs in the area:

- ART 231 • LIT 201, 202, 203 • LIT 230
- ART 232 • LIT 211, 212 • MUS 131, 132, 133
- ART 233 • LIT 227 • THE 201, 202, 203

The curriculum portion of this catalog lists all degree and certificate programs, identifying the specific and general education courses required for each academic program.

Please note: General Education requirements may not be the same for each program. It is important to check with an academic counselor to ensure that the correct general education courses are being selected for the student's academic program.

Degree seeking students will participate in assessments of General Education prior to graduation.

General Education Core Course Requirements

Sinclair students who are seeking degrees are required to complete a series of courses to fulfill General Education requirements. This series of courses is incorporated into the curriculum plan for every program of study leading to a two-year degree. The minimum required courses include:

At least two courses of written communication (selected from one of the following sequences: ENG 111, 112, 113; ENG 131, 132; ENG 121, 122)

Subject Code No.	Title	Credit Hours
ENG 111	English Composition I	3
ENG 112	English Composition II	3
ENG 113	English Composition III	3
ENG 131	Business Communications I	3
ENG 132	Business Communications II	3
ENG 121	Technical Composition I	3
ENG 122	Technical Composition II	3

One course of oral communication (COM courses)

Subject Code No.	Title	Credit Hours
COM 206	Interpersonal Communication	3

One course of mathematics (MAT 100 level or higher or demonstrated proficiency via examination)

Subject Code No.	Title	Credit Hours
MAT 101	Elementary Algebra	4
MAT 102	Intermediate Algebra	5
MAT 105	Business Mathematics	4
MAT 116	College Algebra	5

One course of humanities from any on the specified list

Subject Code No.	Title	Credit Hours
HUM 130	Humanity & the Challenge of Technology	3
HUM 131	The Search for Utopia	3
HUM/ EGR 132	Connecting Technology & Our Lives	3

One course of social science (PSY, SOC, PLS, HIS, GEO, ECO, SWK, or HUM 115)

Subject Code No.	Title	Credit Hours
PSY 119	General Psychology	5
PSY 121	General Psychology I	3
PSY 122	General Psychology II	3
PSY 208	Life Span Human Development	5
SOC 111	General Sociology I	3
SOC 145	Comparing Cultures	3
PLS 101	American Federal Government I	3
HIS 101	United States History (1607-1815)	3
HIS 111	Western Civilization (0-1300)	3
HIS 112	Western Civilization (1300-1815)	3
HIS 113	Western Civilization (1815-present)	3
GEO 101	Physical Geography	3
ECO 201	Principles of Economics I	3
SWK 206	Introduction to Social Welfare	3
HUM 115	International Environment: Culture & Business	3

A computer theory/application course (This may be a course within the program of study, a module within a course in the program of study, or a CIS course.)

Subject Code No.	Title	Credit Hours
BIS 101	Personal Computer Keyboarding	2
BIS 160	Introduction to Word, PowerPoint & Excel	3
CIS 107	Introduction to Operating Systems	3

Students who have an understanding of, and an appreciation for, the humanities and wish to study one aspect of the humanities can select one of the following courses:

Subject Code No.	Title	Credit Hours
ART 101	Introduction to Art	3
ART 102	Art Media	3
ART 125	African Art	3
ART 235	History of Photography	3
DAN 155	Dance History	3
DAN 157	Dance Appreciation	3
GEO 102	Human Geography	3
HIS 105	African-American History	4
HIS 111	Western Civilization (0-1300)	3
HIS 112	Western Civilization (1300-1815)	3
HIS 113	Western Civilization (1815-present)	3
HUM 125	The Human Image	3
HUM 141	Appalachia	3
HUM 205	Cultures of Ancient Greece & Rome	3
HUM 245	The Vietnam War: Narratives & Issues	3
HUM 255	People & Religion	3
MUS 115	Music Appreciation	3
PHI 205	Introduction to Philosophy	3
REL 111	Eastern Religions	3
REL 112	Western Religions	3
REL 135	American Religious Movements	3
THE 105	Theatre Appreciation	3

Students with a fairly substantial background in a discipline can select a course from the following which are designed for majors in this area:

Subject Code No.	Title	Credit Hours
ART 231	Art of the Ancient World	3
ART 232	Art of the Medieval & Renaissance Worlds	3
ART 233	Art of the Modern World	3
LIT 201	Survey of English Literature (to 1660)	3
LIT 202	Survey of English Literature (1660-1832)	3
LIT 203	Survey of English Literature (1832-present)	3
LIT 211	Survey of American Literature I (Pro-Modern)	3
LIT 212	Middle American Literature	3
LIT 227	Introduction to Shakespeare	3
LIT 230	Great Books of the Western World	3
MUS 131	Survey of Musical Styles I	3
MUS 132	Survey of Musical Styles II	3
MUS 133	Survey of Musical Styles III	3
THE 201	History of Theatre I	3
THE 202	History of Theatre II	3
THE 203	History of Theatre III	3

Note: Courses on the above list are suggested from the top 45 courses taught at Sinclair in terms of enrollment. In addition, General Education requirements may not be the same for each program. Other options to complete General Education requirements exist. Therefore, it is important to check with an academic counselor to ensure that the correct general education courses are being selected for the student's major.

Competencies Across the Curriculum & Measurable Outcomes

Oral Communication

is the creation of common understanding through the use of verbal and nonverbal messages in a variety of contexts.

At the completion of the associate degree at Sinclair, the student should be able to:

- Organize ideas in a logical and purposeful way, using effective verbal and nonverbal skills to explain those ideas in a variety of oral communication interactions
- Compose and deliver oral messages appropriate to an intended audience
- Acknowledge diverse opinions, cultural and individual differences in communication interactions
- Paraphrase information and opposing points of view in conversation
- Demonstrate understanding and use of attentive, effective, and respectful listening behaviors in oral communication situations
- Phrase questions in order to obtain information in a variety of interactions
- Use communication skills to manage conflict

Written Communication

is the written expression of clear ideas in standard English and the ability to analyze and interpret college level material.

At the completion of the associate degree at Sinclair, the student should be able to:

Apply the stages of the writing process (prewriting, drafting, revising, and editing) a document

- Identify suitable topics and controlling ideas
- Develop suitable topics and controlling ideas
- Generate and select logical and sufficient evidence/support
- Arrange ideas appropriately
- Engage in purposeful revision and editing (self-assessment, provide feedback to others, respond to assessment, etc.)
- Shape messages to appeal to multiple audiences and situations
- Compose works that apply the correct structures of composition:
 - Coherent paragraphing
 - Intelligible sentence structure
 - Precise and varied word choice
 - Correct spelling, grammar, and mechanics

Integrate Sources

- Select credible and relevant sources using the library, electronic resources, and/or field research
- Synthesize multiple sources to support one central idea
- Incorporate sources (using summary, paraphrase, and quotation)
- Cite and document appropriately for specific discipline

Read and Respond Critically

- Identify relationships between/among main points and supporting ideas
- Identify explicit and implicit ideas
- Evaluate effectiveness of written works
- Develop responses to readings that reflect higher level thinking skills

Critical Thinking /Problem Solving

is the application of higher order analytical and creative cognitive processes.

At the completion of the associate degree at Sinclair, the student should be able to:

- Raise relevant questions
- Articulate ideas or problems

- Organize observable data into useful formats
- Use appropriate problem solving methods
- Exhibit openness to alternative ideas
- Construct measures to evaluate appropriateness, truthfulness, usefulness or validity of an idea or argument
- Demonstrate analysis of information to support a chosen position with attention to consequences
- Recognize logical fallacies

Values/Citizenship/Community

is an awareness of personal obligations and responsibilities in one's community of influence.

At the completion of the associate degree at Sinclair, the student should be able to:

Examine personal values

- Reflect on personal values
- Demonstrate recognition of different value systems

Display behavior consistent with the ethical standards within a discipline or profession

Act as a responsible citizen in a variety of communities

- Exhibit behavior congruent with policies contained in the Sinclair *Student Handbook*, including the Sinclair Honor Code
- Take responsibility for actions
- Demonstrate honesty in a variety of contexts
- Respect the rights of others
- Demonstrate respect for diverse cultures
- Understand the expectations, obligations, and processes of local and global citizenship

Information Literacy

is the ability to effectively locate, evaluate, and use information.

At the completion of the associate degree at Sinclair, the student should be able to:

- Formulate a thesis and questions based on need
- Identify appropriate investigative methods
- Access information using library resources, electronic resources and/or field resources
- Analyze information
- Evaluate information
- Organize information systematically and appropriately
- Use information legally

Computer Literacy

is the ability to apply concepts and terminology in the basic operation of computers.

At the completion of the associate degree at Sinclair, the student should be able to:

Utilize electronic mail applications

- Create e-mail messages
- Manage mailboxes
- Use e-mail features (possible examples: open, reply, forward, open attachments, and scan for viruses)

Utilize Internet applications

- Navigate between and within web sites
- Select appropriate search engines for desired information
- Construct and refine searches

Utilize word processing applications

- Create, format, and edit documents for readability and grammar
- Incorporate word processing features as needed: (possible examples: creating tables, importing graphic objects, inserting headers/footers, and designing layout)

Utilize operating system software and data management skills

- Employ desktop operating skills (use mouse buttons or keyboard shortcuts)
- Apply appropriate file and disk management techniques (rearrange files, copy, delete, rename, and backup data)

Degrees

A.A. - Associate of Arts
 A.A.S. - Associate of Applied Science
 A.S. - Associate of Science
 A.T.S. - Associate of Technical Study
 A.I.S. - Associate of Individualized Study

Career Programs (A.A.S.)

Accounting
 American Sign Language Interpreting for the Deaf
 Architectural Technology
 Automation & Control Technology with Robotics
 Automotive Technology
 Aviation Technology
 Options: Aviation Maintenance
 Professional Pilot & Airway Science
 Biotechnology
 Business Information Systems
 Options: Accounting Office
 Legal Office
 Medical Office
 Business Management
 Concentration: Entrepreneurship
 Civil Engineering Technology
 Option: Construction Management
 Computer Aided Manufacturing/CNC Technology
 Options: CAM/Precision Machining
 CAM/Mechanical
 Computer Information Systems
 Concentration: Microsoft Security Specialist
 Network Engineer
 Network Manager
 Software Development
 User Support
 Web Development
 Corrections
 Options: Community Based
 Institutional
 Dental Hygiene Technology
 Dietetics & Nutritional Management Technology
 Early Childhood Education
 Electronics Engineering Technology
 Engineering Technology Design
 Environmental Engineering Technology
 Financial Management
 Fire Science Technology
 Option: Fire Administration
 Health Information Management
 Heating, Ventilating, Air Conditioning & Refrigeration
 Engineering Technology
 Hospitality Management
 Option: Culinary Arts
 Industrial Engineering Technology
 Option: Manufacturing Engineering Technology
 Integrative Medical Massage Therapy
 Interior Design
 Law Enforcement

Options: Industrial/Retail Security
 Police Science

Marketing Management
 Mechanical Engineering Technology
 Medical Assistant Technology
 Mental Health Technology
 Nursing
 Occupational Therapy Assistant
 Paralegal
 Personal Computer Applications
 Physical Therapist Assistant
 Quality Engineering Technology
 Option: Quality Assurance
 Radiologic Technology
 Real Estate/Property Management
 Respiratory Care
 Safety Engineering Technology
 Surgical Technology
 Travel & Tourism
 Visual Communications

Certificate Programs

Airframe Aviation Maintenance
 Airline Flight Attendant
 Automotive Technology
 Business Management
 Church Music
 Computer Aided Manufacturing/Tool & Die
 Computer Aided Manufacturing/Project Step II
 Deaf Studies
 Early Childhood Studies
 Entrepreneurship
 Fire Administration
 Fire Science Technology
 Food Service Management
 General Aviation Maintenance
 Human Services
 Infant/Toddler Education
 Information Processing
 Medical Office Specialist
 Personal Computers for Business
 Plastics & Composites Engineering Technology
 Powerplant Aviation Maintenance
 Quality Control Technology
 Safety Engineering Technology
 Surveying
 Urban Studies

Degrees

Short Term Certificates

Activity Programming
Advanced Networking Engineer
Allied Health Management
Aircraft Dispatcher
Arts Administration
Automotive High Performance
Basic Drawing
Business Operations Systems Support
Call Center
Ceramics & Sculpture Technology
Chemical Dependency Counseling
Clinical Phlebotomy
Computer Aided Manufacturing/Top Gun Machining Academy
Construction Safety
Construction Supervisor
Construction Technician
Continuous Process Improvement
Corrections
Dance
Desktop Publishing
Dietary Manager
Digital Printing
Digital Systems
Drafting & Design
Electrical Construction
Electrocardiography
EMT-Basic Certificate
EMT-Paramedic Certificate
Exercise Specialist
Expanded Functions for Dental Auxiliaries
Facilities Management
Family Advocate
Fast Track Entrepreneur
Fast Track Programmer Analyst
Financial Management
Firefighter Technician
Ford Maintenance & Light Repair
General Industry Safety
Help Desk Analyst
Human Resource Management
Industrial Fire Protection Technician
Industrial Maintenance Technician
Industrial Robot Technician
JAVA Enterprise Development
Light Commercial HVAC Service
Manufacturing Management
Measurement & Calibration
Mechanical Maintenance
Medical Office Coding Specialist
Multi-Skilling Health Care
Multimedia
Network Engineering Associate
Ohio Real Estate Broker

Ohio Real Estate Sales Associate
Pharmacy Technician
Photographic Technology
Professional Communication
Rescue Technician
Security for the Networking Professional
Small Office Home Computer Use & Security
Social Service
Software Applications for the Professional
Tax Practitioner
Tissue Banking Technologist
Web Authoring
Web Programming

Individualized Degrees

Associate of Technical Study
Associate of Individualized Study

University Parallel Programs (A.A. & A.S.)

Art
Business Administration
Communication Arts
Dance
Engineering Science
Liberal Arts & Sciences
Emphases: African-American Studies
Biology
Chemistry
Creative Writing
Elementary Education
English
Environmental Science
Geography
Geology
History
Mathematics
Modern Languages
Philosophy/Religion
Physics
Political Science
Psychology
Secondary Education
Social Work
Sociology

Music Education
Music Performance
Physical Education
Public Services
Options: Human Services
Public Administration
Theatre Performance
Theatre Technology

Specialized Courses

Basics of Activities Programming
Nurse Aide Training

A.T.S./A.I.S.



Sinclair is the best choice I've made. It was a great stepping stone to a four-year college.

—Jessy Henning,
Graduate

Associate of Individualized Study (93 Total Credit Hours)

The Associate of Individualized Study (A.I.S.) degree is open to any student who wishes to design an interdisciplinary degree program using liberal arts or combining liberal arts with technical areas of study. The student may focus specifically on education for individual development and enrichment or may design a curriculum which allows for employment or continuation into selected four-year degree programs. Students are assisted in the degree planning process by a faculty committee which represents the various areas of study incorporated into the degree. Interested students should contact the A.I.S. coordinator in the Experience Based Education department, (937) 512-2962, or the EBE office, (937) 512-5101.

Interdisciplinary Component

A minimum of 45 quarter hours from two to three distinct areas of study.

General Education

English	First of sequence	3 hours
English	Second of sequence	3 hours
Communication	Elective	3 hours
Mathematics	at 100 level or above	3 hours
Social Science	Elective	3 hours
Computer Literacy	Elective	2-3 hours
Humanities	Elective	3 hours

Total General Education

A minimum of 20 quarter hours.

Experience Based Education

EBE 130	Degree Planning Seminar	3 hours
EBE 278	A.T.S./A.I.S. Capstone	3 hours

Total Experience Based Education (EBE)

A minimum of 6 quarter hours.

Related Electives

A minimum of 21 hours.

A minimum of 93 total hours required to earn the A.I.S. degree.

Associate of Technical Study (93 Total Credit Hours)

The Associate of Technical Study (A.T.S.) degree is open to any student whose technical degree goals cannot be accomplished through enrollment in one of Sinclair's existing technical degree programs. The student may design a degree which combines two or more technical areas into a unique education plan. As an alternative, part of the student's degree requirements may incorporate credit awarded through articulation agreements with community education providers, or a combination of both. In all cases, faculty members assist the student in planning the most appropriate course of study for the individual. Interested students should contact the A.T.S. coordinator in the Experience Based Education department, (937) 512-2962, or the EBE office, (937) 512-5101.

Technical Education

A minimum of 45 quarter hours incorporating articulated credit or combining no more than three distinct areas of study.

General Education

English	First of sequence	3 hours
English	Second of sequence	3 hours
Communication	Elective	3 hours
Mathematics	100 level or above	3 hours
Social Science	Elective	3 hours
Computer Literacy	Elective	2-3 hours
Humanities	Elective	3 hours

Total General Education

A minimum of 20 quarter hours

Experience Based Education

EBE 130	Degree Planning Seminar	3 hours
EBE 278	A.T.S./A.I.S. Capstone	3 hours

Total Experience Based Education (EBE)

A minimum of 6 quarter hours

Related Electives

A minimum of 21 hours

A minimum of 93 total hours required to earn the A.T.S. degree.

Allied Health Technologies



***The use of
advanced
technology has
helped me to
prepare.***

— John Kahle

Departments

ALH

Planning the Program

Most programs in the Allied Health Technologies division are seven quarters in length and commence fall quarter. However, students may begin any quarter to take the general education and science support courses that relate to their program. Only after formal written acceptance into an Allied Health program can the technical courses associated with that program begin. Once the technical course series is started, each course thereafter, until completion of the program, must be completed in sequence.

Enrollment in Allied Health programs is limited, and applicants must meet specific admission requirements prior to acceptance. These requirements are outlined by the academic counselors in the Allied Health counseling office.

Allied Health program admission packets are available in Room 10112. A complete physical and dental examination is required after acceptance and prior to entry into most programs in the Allied Health division.

Some courses have prerequisites; others must be taken in special sequences. It is recommended that the student see an Allied Health counselor to plan a course of study, Room 6120, (937) 512-3029.

Allied Health students are expected to make satisfactory progress in acquiring knowledge and skills. The students must earn at least a grade of "C" (2.0) in all required courses and maintain a 2.0 GPA to continue in an Allied Health program.

Academic Advising Office Hours

Monday-Thursday
8:00 a.m. - 7:00 p.m.

Friday
8:00 a.m. - 5:00 p.m.
(4:30 p.m. in summer)

Building 6, First Floor
(937) 512-3700

Allied Health Technologies

University Parallel Transfer Degree Programs

The students planning to pursue a baccalaureate degree after receipt of the associate degree in one of the Allied Health programs at Sinclair, should contact the transfer institution well in advance to determine what courses will be accepted for transfer. The students should work closely with their division counselor or faculty advisor to select electives and other courses that will be accepted by the four-year school.

Similar action should be taken by an Emergency Medical Services students planning to transfer to the associate degree program in Emergency Medical Technology at Clark State Community College following completion of the initial year of this program at Sinclair.

As a general rule, Liberal Arts & Sciences courses taken as part of an Allied Health career program will transfer to a baccalaureate program. Technical courses may also transfer depending on the particular major and the institution to which the students plan to transfer.

Articulation Agreements

The division of Allied Health Technologies has a number of transfer agreements which have been developed to assist students in transferring.

Capital University
Clark State Community College
College of Mt. St. Joseph on the Ohio
Edison State Community College
Kettering College of Medical Arts
Miami University
Ohio State University
Raymond Walters College
University of Cincinnati
Wright State University
University of Toledo
Urbana University

For more information, contact the Allied Health counselor's office, Room 6120, (937) 512-3029.

Dr. David L. Collins, Dean
(937) 512-2919, Room 6111

Ann Hall
Academic Counselor
(937) 512-3029, Room 6120

Pauline McClain-Jones
Academic Counselor
(937) 512-3029, Room 6120

Amy Samborsky
Academic Counselor
(937) 512-3029, Room 6120

Patricia Jayson
Academic Counselor
(937) 512-3029, Room 6120

Patricia Willis
Academic Counselor
(937) 512-3029, Room 6120

Dental Hygiene
Rena Shuchat, Chairperson
(937) 512-2779, Room 4332

Dietetics & Nutritional Management
Nora Schaefer, Chairperson
(937) 512-2756, Room 13426

Emergency Medical Services
Chuck Sowerbrower, Chairperson
(937) 512-5338, Room 19223

Health Information Management
Barbara Wallace, Chairperson
(937) 512-5353, Room 2122

Medical Assistant Technology
Jennifer Barr, Chairperson
(937) 512-2973, Room 2122

Mental Health Technology
Linda Mowrey, Chairperson
(937) 512-2845, Room 9217

Nursing
Dr. Gloria Goldman, Chairperson
(937) 512-2848, Room 3331

Occupational Therapy Assistant
Kay Ashworth, Chairperson
(937) 512-5177, Room 1031

**Physical Therapist Assistant
Integrative Medical Massage Therapy**
Colleen Whittington, Chairperson
(937) 512-5355, Room 1011

Radiologic Technology
Debbie Schwartz, Chairperson
(937) 512-2159, Room 3340

Respiratory Care
Cynthia Beckett, Chairperson
(937) 512-2268, Room 3340

Surgical Technology
Susan Willin-Mulay, Chairperson
(937) 512-5355, Room 3340

Dental Hygiene

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIO	143	Principles of Anatomy & Physiology III	4
DEH	103	Head & Neck Anatomy	4
CHE	122	Introduction to Biochemistry	4
ENG	111	English Composition I	3
DEH	105	Introduction to Dental Hygiene	2
TOTAL			17
SECOND QUARTER			
DEH	111	Pre-Clinical Dental Hygiene I	4
DEH	155	Oral Histology, Embryology & Pathology	4
DEH	157	Research Methodology	2
BIO	205	Microbiology	4
ENG	112	English Composition II	3
TOTAL			17
THIRD QUARTER			
DEH	112	Pre-Clinical Dental Hygiene II	4
DEH	135	Dental Radiology	4
DEH	156	Dental Hygiene Research Project	1
DEH	220	Medical Emergencies in the Dental Office	2
DEH	106	Nutrition & Oral Health	3
ALH	220	Pathophysiology	4
TOTAL			18
FOURTH QUARTER			
DEH	113	Clinical Dental Hygiene I	3
DEH	165	Computer Applications in Dentistry	1
DEH	215	Periodontics I	2
MAT	101	Elementary Algebra	4
PSY	119	General Psychology I	3
TOTAL			15
FIFTH QUARTER			
DEH	125	Dental Materials	3
DEH	211	Clinical Dental Hygiene II	6
DEH	210	Drug Therapy in Dentistry	2
DEH	235	Community Dental Health I	3
TOTAL			14
SIXTH QUARTER			
DEH	212	Clinical Dental Hygiene III	6
DEH	250	Periodontics II	2
DEH	253	Pain Control in Dentistry	1
COM	211	Effective Speaking I	3
SOC	111	General Sociology I	3
TOTAL			15
SEVENTH QUARTER			
DEH	213	Clinical Dental Hygiene IV	6
DEH	236	Community Dental Health II	2
DEH	255	Dental Hygiene Practice	2
—	—	Humanities Elective*	3
TOTAL			13
*See page 80.			
Technical Electives			
DEH	247	Expanded Function for Dental Auxiliaries I	6
DEH	248	Expanded Function for Dental Auxiliaries II	6
DEH	249	Expanded Function for Dental Auxiliaries II	6

Career Program

Description

Working with the supervision of a dentist, dental hygienists scale, polish teeth, chart abnormalities, take radiographs, apply preventive agents, impart dental health information and take health histories.

This program, accredited by the Commission on Dental Accreditation, is designed to be completed in seven (7) consecutive quarters on a full-time basis. The general education courses and selected Dental Hygiene courses may be taken prior to admission to the program. A grade of 2.0 or higher is required in all courses. The students must successfully complete the application requirements as outlined in the Dental Hygiene admission packet. Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120. The graduates are eligible to take the Dental Hygiene National Board, the North East Regional Board or similar state boards, and to apply for state licensing.

Program Prerequisites:

DEH 120	Introduction to Dental Terminology	1 cr. hr.
BIO 141	Principles of Anatomy & Physiology I	4 cr. hrs.
BIO 142	Principles of Anatomy & Physiology II	4 cr. hrs.
ALH 104	Allied Health Informatics	2 cr. hrs.

Type of Degree or Certificate

Associate of Applied Science

109 Total Credit Hours

Career Opportunities

Career options may vary according to state practice acts restrictions. Dental hygienists have a variety of career options in a wide range of employment settings, including private practice, hospitals, HMO's, community health programs, long-term care facilities, school systems, dental product marketing and sales, federal facilities and product companies, military bases, universities and research centers.

Career Program

Description

Graduates of the dietetic program are trained food and nutrition professionals who function as members of the food service and nutrition care teams under the supervision of a registered dietitian. They promote health by providing personalized services and referral to ensure proper nutrition.

The Dietetics & Nutritional Management Technology program is fully accredited by the American Dietetic Association, Commission on Accreditation for Dietetic Education (CADE) a specialized accrediting body recognized by the Council of Postsecondary Accreditation and the United States Department of Education. It is also approved by the Dietary Managers Association. Completion of the DIT program will enable the graduates to become registered technician members of the American Dietetic Association (ADA) upon successful completion of a national examination. Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120.

Type of Degree or Certificate

Associate of Applied Science

110 Total Credit Hours

Career Opportunities

Graduates of Sinclair's Dietary Managers program can find employment in dietary departments in hospitals, long term care facilities, day care centers, school food service systems, correctional institutions and other non-commercial food service settings.

Dietary managers may work as food service directors, assistant food service directors, supervisors, clinical care professionals, multi-department managers, high level administrators in large service organizations, consultants, or entrepreneurs.

Dietetics & Nutritional Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	103	Introduction to Health Care Delivery	3
CHE	120	Introduction to Chemistry	4
DIT	112	Medical Terminology for DIT	2
DIT	109	Introduction to Dietetics	2
MAT	101	Elementary Algebra	4
TOTAL			15
SECOND QUARTER			
DIT	129	Human Nutrition	5
DIT	137	Food Sanitation & Safety	3
CHE	122	Introduction to Biochemistry	4
ALH	104	Allied Health Informatics	2
HMT	101	Dining/Kitchen Orientation	2
TOTAL			16
THIRD QUARTER			
DIT	135	Nutrition in the Life Cycle	4
DIT	224	Community Nutrition	3
ENG	111	English Composition I	3
HMT	112	Basic Food Preparation	5
HMT	113	Lab for HMT 112	—
TOTAL			15
FOURTH QUARTER			
PSY	119	General Psychology I	3
COM	206	Interpersonal Communication	3
ENG	112	English Composition II	3
SOC	111	General Sociology I	3
DIT	—	Dietetics Elective	2
DIT	—	Humanities Elective*	3
TOTAL			17
FIFTH QUARTER			
DIT	226	Dietetics Directed Practice I	4
DIT	221	Medical Nutrition Therapy I	3
DIT	225	Educational Methods & Materials	3
DIT	240	Food & Culture	2
DIT	208	Advanced Food Preparation & International Cuisine	2
DIT	209	Laboratory for DIT 208	2
DIT	200	Dining Assistant	1
TOTAL			17
SIXTH QUARTER			
DIT	227	Dietetics Directed Practice II	4
DIT	219	Laboratory for DIT 216	1
DIT	216	Food Preparation & Dietary Service	4
DIT	218	Directed Practice for DIT 216	3
DIT	222	Medical Nutrition Therapy II	3
TOTAL			15
SEVENTH QUARTER			
DIT	255	Dietetics Seminar	2
DIT	236	Dietary Organization & Management	4
DIT	237	Directed Practice for DIT 236	3
DIT	228	Dietetics Directed Practice III	3
DIT	223	Medical Nutrition Therapy III	3
TOTAL			15

*See page 80.

Health Information Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
HIM	122	Specialized Medical Terminology	3
HIM	110	Health Information Processing I	3
HIM	135	Medicolegal Aspects of Health Care Records	3
BIO	162	Human Anatomy & Physiology II	5
BIS	M85	Microsoft Word	2
			TOTAL
			16
SECOND QUARTER			
HIM	111	Health Information Processing II	3
HIM	220	Health Information in Long Term Care	2
HIM	260	ICD-9-CM Medical Office Coding	3
HIM	261	CPT Medical Office Coding	3
ALH	103	Introduction to Health Care Delivery	3
BIS	M45	Microsoft Excel	2
			TOTAL
			16
THIRD QUARTER			
HIM	240	Hospital Ambulatory Coding	4
HIM	245	Health Information Resource Management	3
HIM	265	Health Care Data in Reimbursement	3
ALH	142	Fundamentals of Disease Processes	4
			TOTAL
			14
FOURTH QUARTER			
MAT	106	Allied Health Mathematics	4
			or
			Elementary Algebra
COM	206	Interpersonal Communication	3
			or
			Effective Speaking I
HIM	178	HIM Intermediate Capstone	1
ALH	201	Survey of Drug Therapy	2
BIS	M35	Microsoft Access	2
ENG	111	English Composition I	3
			or
			Business Communications I
			TOTAL
			15
FIFTH QUARTER			
HIM	241	Hospital Inpatient Coding	4
HIM	244	Health Care Quality Improvement	3
HIM	250	Supervised Professional Practice I	2
CIS	265	Database Management Systems	3
ENG	112	English Composition II	3
			or
			Business Communications II
			TOTAL
			15
SIXTH QUARTER			
HIM	246	Health Care Information Systems	3
HIM	228	Clinical Abstracting	3
HIM	249	Health Care Statistics	2
HIM	251	Supervised Professional Practice II	3
BIS	M55	Microsoft PowerPoint	2
PSY	121	General Psychology I	3
			or
			General Sociology I
			TOTAL
			16
SEVENTH QUARTER			
HIM	258	Health Information Registries	2
HIM	252	Supervised Professional Practice III	4
HIM	278	HIM Capstone	3
			Humanities Elective*
			3
HIM	—	Health Information Management Portfolio Elective	3
			TOTAL
			15

*See page 80.

Career Program

Description

Health Information technicians are experts in the field of managing and protecting patient health information and medical records, administering computer information systems, and coding the diagnoses and procedures for health care services provided to patients. HIM professionals work in a variety of settings including, but not limited to, hospitals, physician offices, long-term care facilities, home health agencies, insurance companies, and government agencies. The program is offered during the daytime only and is designed to be completed in seven (7) full-time consecutive quarters. Some students elect to attend on a part-time basis, extending the length of study to three academic years. The curriculum includes three professional practice experiences at area health care facilities for which students are expected to provide their own transportation. A complete physical exam and specific immunizations are required at the students' expense prior to enrolling in the first professional practice experience course. To enroll in most health information management courses, students must first be accepted into the HIM Program. An overall grade point average of 2.0 is a requirement of admission and must be maintained in order to continue through the program.

Allied Health application packets are available from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail or in person to Building 6, Room 6120. The Health Information Management Program is fully accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Program Prerequisites:

ALH	104	Allied Health Informatics	2 cr. hrs.
BIO	161	Human Anatomy & Physiology I	5 cr. hrs.
HIM	121	Basic Medical Terminology	3 cr. hrs.

GPA of 2.0 or higher

Type of Degree or Certificate

Associate of Applied Science

107 Total Credit Hours

Career Opportunities

Employment prospects for health information management specialists are excellent throughout the nation. Positions are possible in workplace settings involved with acquisition and maintenance of patient medical information. Many HIM graduates work in hospitals and clinics. Job opportunities include: ambulatory care centers, nursing homes and long-term care centers, mental health care and psychiatric facilities, home health care agencies, hospice facilities, physician offices, insurance companies, law firms, colleges and universities, state and federal agencies, consulting firms, medical research institutions, companies that market health information products and services.

Career Program

Description

The Massage Therapy program is a partnership between Sinclair and SHI Medical Massage School of Lebanon, Ohio. Completion of the curriculum will lead to a diploma issued by SHI which is recognized and certified by the State of Ohio Medical Board. An associate of applied science degree is issued by Sinclair with the successful completion of the seventh quarter of course work. The students are then eligible to take the state licensing examination. The program adheres to the competencies and conduct expectations of the American Massage Therapy Association and the State of Ohio Medical Board's Code of Ethics, and Standards of Practice. One class is admitted each fall quarter. Information is available through the Allied Health counselors in Room 6120, (937) 512-3029 or the IMT program at (937) 512-5355.

Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120.

Program Prerequisites:

BIO 107 Human Biology 5 cr. hrs.
and
2.5 GPA

Type of Degree or Certificate

Associate of Applied Science

101 Total Credit Hours

Career Opportunities

Massage therapy is an emerging profession with a strong entrepreneurial status. A licensed massage therapist will typically work less than 40 hours a week, limiting their energy expenditure to avoid occupational injury. The salary for massage therapists depends on the practice setting and time invested by the practitioner developing their business or professional affiliation.

Integrative Medical Massage Therapy

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	104	Allied Health Informatics	2
ENG	131	Business Communications I	3
		or	
	111	English Composition I	
MAT	105	Business Mathematics	4
		or	
	101	Elementary Algebra	
HIM	121	Basic Medical Terminology	3
IMT	105	Personal Assessment for Massage Therapists	2
IMT	151	Introduction to Holistic Therapies	1
		TOTAL	15
SECOND QUARTER			
ENG	132	Business Communications II	
		or	
	112	English Composition II	3
FIN	245	Personal Finance	3
ALH	140	Basic Life Support Training	1
IMT	101	Integrative Medical Massage Therapy I	3
SOC	111	General Sociology I	3
		or	
	145	Comparing Cultures	
IMT	106	Business Ethics for the Massage Therapist	1
		TOTAL	14
THIRD QUARTER			
IMT	103	Integrative Medical Massage Therapy II	5
IMT	107	Anatomy & Physiology for the Massage Therapist I	5
IMT	152	Pain Management for Massage Therapists	2
BUO	105	Business Ownership Orientation	3
		TOTAL	15
FOURTH QUARTER			
IMT	205	Integrative Medical Massage Therapy III	5
IMT	210	Anatomy & Physiology for the Massage Therapist II	5
		TOTAL	10
FIFTH QUARTER			
IMT	207	Integrated Medical Massage IV	5
IMT	212	Anatomy & Physiology for the Massage Therapist III	5
IMT	216	Business Practices for the Massage Therapist I	3
COM	206	Interpersonal Communication	3
		TOTAL	16
SIXTH QUARTER			
IMT	208	Integrative Medical Massage Therapy V	5
IMT	214	Anatomy & Physiology for the Massage Therapist IV	5
IMT	218	Massage Therapy Practicum	2
	—	Humanities Elective*	3
		TOTAL	15
SEVENTH QUARTER			
IMT	220	Anatomy & Physiology Seminar	3
IMT	221	Massage Therapy Seminar	3
IMT	223	Business Practices for the Massage Therapist II	2
PSY	—	Psychology Elective	3
		TOTAL	11

*See page 80.

Medical Assistant

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
MAS	103	Medical Law & Ethics	2
HIM	121	Basic Medical Terminology	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
BIO	107	Human Biology	5
ENG	131	Business Communications I	3
TOTAL			16
SECOND QUARTER			
MAS	102	Medical Office Accounting	3
HIM	122	Specialized Medical Terminology	3
ALH	104	Allied Health Informatics	2
ALH	142	Fundamentals of Disease Processes	4
ALH	106	Introduction to Basic Health Care Practice	2
ENG	132	Business Communications II	3
TOTAL			17
THIRD QUARTER			
MAS	104	Basic Clinical Assisting Procedures	3
MAS	105	Medical Office Management	3
PSY	121	General Psychology I	3
ALH	201	Survey of Drug Therapy	2
COM	206	Interpersonal Communication	3
TOTAL			14
FOURTH QUARTER			
MAT	106	Allied Health Mathematics	4
PSY	122	General Psychology II	3
ALH	140	Basic Life Support Training	1
		General Education Elective*	3
TOTAL			11
FIFTH QUARTER			
MAS	106	Medical Office Emergency Procedures	3
MAS	201	Family Practice Clinical Assisting Procedures	3
MAS	202	Insurance & Patient Records	3
MAS	203	Medical Assisting Directed Practice I	2
HIM	260	ICD-9-CM Medical Office Coding	3
HIM	261	CPT Medical Office Coding	3
TOTAL			17
SIXTH QUARTER			
MAS	204	Medical Assisting Directed Practice II	3
MAS	206	Special Clinical Assisting Procedures	3
MAS	207	Medical Laboratory Procedures	3
ALH	130	Electrocardiography for the Health Care Provider	1
ALH		Portfolio Elective	3
TOTAL			13
SEVENTH QUARTER			
MAS	205	Medical Assisting Directed Practice III	5
MAS	208	Medical Assisting Seminar	2
BIS	220	Computer Applications for the Medical Office	4
		Humanities Elective*	3
TOTAL			14

*See page 80.

Career Program

Description

Medical assistants are multi-skilled professionals who assist physicians with the administrative and clinical aspects of patient care. The Sinclair Medical Assistant program is accredited by the Commission on Accreditation of Allied Health Programs (CAAHEP) on recommendation of the curriculum review board of the American Association of Medical Assistant's Endowment (AAMAE). To enroll in medical assisting classes, individuals must be accepted into the Medical Assistant Technology program. A grade of "C" is required in all medical assisting courses and the required general education courses. An overall grade point average of at least 2.0 is required to continue in the program. A cumulative grade point average of at least "C" (2.0) is required for graduation. The students will be required to complete 360 hours of non-paid directed practice during their second year of the program. The graduates are eligible to take the National Certification Examination to become a Certified Medical Assistant (CMA). **Note:** Professional CPR is required prior to MAS 106 and must remain current throughout the program. A complete physical examination and specific immunizations are required at the students' expense, prior to enrolling in the directed practice component of the curriculum.

Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120.

Program Prerequisites:

ALH 103	Introduction to Health Care Delivery	3 cr. hrs.
MAS 101	Introduction to Medical Assisting	2 cr. hrs.

Type of Degree or Certificate

Associate of Applied Science

102 Total Credit Hours

Career Opportunities

Currently Medical Assistant Technology is one of the fastest growing occupations in the United States. Options for individuals seeking medical services and treatment: urgent care, surgicare and ambulatory care centers, as well as health maintenance organizations (HMO's), multi-physician group practices and medical specialty clinics have opened new career opportunities.

Career Program

Description

The Mental Health Technology program prepares entry level human service workers for employment working on a professional team with clinical supervision. Duties may include client interviewing, crisis intervention and advocacy, activity therapy, group leadership, and case management.

Graduates of this program work directly with a diverse group of clients in a wide variety of human service agencies. The course of studies can be completed on a full-time (7 quarters) or part-time basis with day and evening options available. The practicum portion of the curriculum provides over 500 hours of supervised clinical experience in human service agencies. Graduates are eligible for registration by the Ohio Counselor and Social Worker Board. A chemical dependency option is offered to prepare students for licensure as a chemical dependency counselor with the Ohio Chemical Dependency Professionals Board. This program is accredited by the Council for Standards in Human Service Education. An informational interview during or after MHT 101 and a 2.0 GPA is required for admission to the program.

Allied Health admission packets may be obtained from Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail or in person to Building 6, Room 6120.

Type of Degree or Certificate

Associate of Applied Science

104-105 Total Credit Hours

Career Opportunities

Entry level positions in a wide variety of mental health, addictions treatment, and human service agencies, clinics, and hospitals, include inpatient and outpatient services; day treatment, case management, and transitional housing programs for the mentally ill, substance abuse programs, services to the homeless and survivors of battering and abuse; programs associated with the criminal justice system; and services for children and the elderly.

Mental Health Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
PSY	121	General Psychology I	3
SOC	111	General Sociology I	3
ALH	104	Allied Health Informatics	2
MHT	101	Introduction to Mental Health Work	3
			<hr/>
TOTAL			14
SECOND QUARTER			
ALH	103	Introduction to Health Care Delivery	3
ENG	112	English Composition II	3
MAT	105	Business Mathematics	4
MHT	115	Social Case Work	3
PSY	122	General Psychology II	3
			<hr/>
TOTAL			16
THIRD QUARTER			
PSY	217	Abnormal Psychology	4
MHT	126	Introduction to Substance Related Disorders	3
BIO	107	Human Biology	5
	—	Humanities Elective*	3
			<hr/>
TOTAL			15
FOURTH QUARTER			
COM	206	Interpersonal Communication	3
PSY	160	African American Psychology	3
PSY	208	Life Span Human Development	5
MHT	201	Interviewing & Assessment	4
			<hr/>
TOTAL			15
FIFTH QUARTER			
MHT	205	Psychosocial Interventions	3
MHT	202	Practicum in Mental Health I	5
MHT	211	Group Dynamics I	3
MHT	—	Mental Health Elective	3
		or	
	130	Treatment Techniques: Addiction	—
			<hr/>
TOTAL			14
SIXTH QUARTER			
MHT	212	Group Dynamics II	3
MHT	203	Practicum in Mental Health II	5
MHT	245	Mental Health & the Family	4
		or	
	128	Family Dynamics of Addiction	—
MHT	—	Mental Health Elective	3
		or	
	136	Ethical Issues in Chemical Dependency Treatment & Prevention	—
			<hr/>
TOTAL			15
SEVENTH QUARTER			
MHT	213	Group Dynamics III	3
MHT	204	Practicum in Mental Health III	5
SOC	205	Social Problems	4
		or	
PSY	214	Drugs & Behavior	—
MHT	132	Assessment of Chemical Dependency	3-4
		or	
	138	Dual Diagnosis: Substance Abuse & Mental Illness	—
		or	
	206	Case Management	—
			<hr/>
TOTAL			15-16

*See page 80.

Nursing

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIO	141	Principles of Anatomy & Physiology I	4
COM	206	Interpersonal Communication	3
PSY	119	General Psychology I	3
ENG	111	English Composition I	3
ALH	103	Introduction to Health Care Delivery	3
TOTAL			18
SECOND QUARTER			
NSG	120	Human Response	3
NSG	121	Identifying Responses Through Assessment	3
MAT	109	Nursing Mathematics	3
BIO	142	Principles of Anatomy & Physiology II	4
BIO	148	Lab for BIO 142	4
BIO	205	Microbiology	4
TOTAL			17
THIRD QUARTER			
NSG	122	Physiological Stressors	8
NSG	123	Promoting Healthy Responses Through Psychomotor Interventions	3
BIO	143	Principles of Anatomy & Physiology III	4
BIO	149	Lab for BIO 143	4
TOTAL			15
FOURTH QUARTER			
NSG	220	Promoting Healthy Responses to Specific Stressors I	8
PSY	208	Life Span Human Development	5
ALH	219	General Pharmacology	3
TOTAL			16
FIFTH QUARTER			
NSG	221	Promoting Healthy Responses to Psychosocial Stressors	4
NSG	222	Promoting Healthy Responses to Specific Stressors II	4
ALH	104	Allied Health Informatics	2
TOTAL			10
SIXTH QUARTER			
ENG	112	English Composition II	3
NSG	223	Promoting Healthy Responses in Women	4
NSG	224	Promoting Healthy Responses to Specific Stressors III	4
TOTAL			11
SEVENTH QUARTER			
NSG	225	Promoting Healthy Responses in the Child & Family	4
NSG	226	Promoting Healthy Responses to Interrelated Pathophysiological Stressors	4
ALH	___	Portfolio Elective	3
TOTAL			11
EIGHTH QUARTER			
NSG	230	Humanities Elective*	3
NSG	230	Directed Nursing Practice	7
TOTAL			10

*See page 80.

Continuing Education Courses

Continuing Education Nursing specialty courses are available to registered nurses and nursing students who have completed NSG 220. Continuing Education courses reinforce previous learning, increase knowledge and develop technical skills in nursing specialty areas. Non-specialty courses are available to all interested health personnel. For details, contact the office of Continuing Education in Nursing, Room 16113, (937) 512-2563.

Advanced Placement for LPN's

Sinclair offers an advanced placement into the nursing program for qualified LPN's. Licensed Practical Nurses may substitute BIO 211 for BIO 141, 142, and 143 and may receive advanced placement credit for NSG 120, 121, 122, and 123 upon successful completion of NSG 130. For more information, contact the Nursing office at (937) 512-2848.

Career Program

Description

The nursing program provides students with the opportunity to become registered nurses. The curriculum is divided among non-nursing and nursing courses, where students participate in classroom activities and hospital experiences caring for people of all ages and health needs.

The Associate Degree Nursing (ADN) program is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, New York 10006, (800) 669-1656, ext. 153, and approved by the State of Ohio Board of Nursing. To enroll in Nursing classes, individuals must be accepted into the Nursing program. The eight-quarter curriculum may be taken on a part-time basis, but Nursing courses must be taken in sequence. General education courses may be taken before admission to the Nursing program, prior to the quarter required, or within the quarter required. A grade of "C" is required in all Nursing courses and the required general education courses. An overall grade point average of at least 2.0 is required to continue in the program. A cumulative grade point average of at least "C" (2.0) is required for graduation. The graduates are eligible to take the National Licensing Examination (N-CLEX-R.N.) to become a Registered Nurse (R.N.).

Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail or in person to Building 6, Room 6120.

Admission Requirements:

- Successful completion of all DEV courses or appropriate score on placement test
- High school chemistry (within previous five years with grade of "C" or better or college equivalent)
- Nursing pre-admission exam
- Certified Nurse Assistant status
Note: CPR certification is required prior to NUR 122 and must remain current throughout the program

Type of Degree or Certificate

Associate of Applied Science

108 Total Credit Hours

Career Opportunities

Registered nurses have a variety of employment opportunities. Work settings may include hospitals, extended care and long-term care facilities, rehabilitation programs, physicians' offices, home health agencies, and various types of clinics.

Career Program

Description

Occupational therapy assistants, under the supervision of occupational therapists, help people prevent, lessen, or overcome physical and mental disabilities so that they are able to function independently.

This program includes extensive clinical training which must be completed within 12 months of completion of the academic course work. It is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's number is (301) 652-2682. Occupational therapy assistants provide services, under supervision of an occupational therapist, to individuals whose abilities to cope with daily tasks are threatened or impaired by developmental deficits, aging, injury or illness. Graduates of the program will be eligible to sit for the national certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this examination, the individuals will be a Certified Occupational Therapy Assistant (COTA) and be eligible for licensure in the State of Ohio.

Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120.

Program Prerequisites:

ALH 104	Allied Health Informatics	2 cr. hrs.
BIO 107	Human Biology	5 cr. hrs.
OTA 101	Introduction to Occupational Therapy Assistant	3 cr. hrs.

Type of Degree or Certificate

Associate of Applied Science

110 Total Credit Hours

Career Opportunities

Occupational therapy is a health care field in which the demand for personnel continues to increase. There are not enough qualified personnel to fill the demand. The national average starting salary for a COTA is \$28,000. COTA's work in hospitals, clinics, schools, nursing facilities, group homes, and rehabilitation centers.

Occupational Therapy Assistant

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
ALH 103	Introduction to Health Care Delivery	3
ALH 142	Fundamentals of Disease Processes	4
OTA 131	Therapeutic Self	9
OTA 160	Learning Communities for OTA	1
TOTAL		17
SECOND QUARTER		
ENG 111	English Composition I	3
HIM 121	Basic Medical Terminology	3
OTA 104	Functional Muscles	1
OTA 132	The Nature of Being Human	9
TOTAL		16
THIRD QUARTER		
COM 206	Interpersonal Communication	3
PSY 121	General Psychology I	3
OTA 105	Functional Nervous System	1
OTA 133	The Dysfunctional Human	9
TOTAL		16
FOURTH QUARTER		
BIS	Business Information Systems Elective	2
ENG 112	English Composition II	3
PSY 122	General Psychology II	3
SOC 111	General Sociology I	3
TOTAL		11
FIFTH QUARTER		
SOC 215	Cultural Diversity	4
OTA	Program Elective	3
OTA 231	Treatment Issues I	9
TOTAL		16
SIXTH QUARTER		
	Humanities Elective*	3
MAT 106	Allied Health Mathematics	4
OTA 232	Treatment Issues II	9
TOTAL		16
SEVENTH QUARTER		
OTA 220	Clinical Affiliation I	3
OTA 233	Clinical Issues I	1
TOTAL		4
EIGHTH QUARTER		
OTA 221	Clinical Affiliation II	3
OTA 234	Clinical Issues II	1
TOTAL		4

*See page 80.

Physical Therapist Assistant

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
PTA 116	Movement Science I	5
ALH 103	Introduction to Health Care Delivery	3
BIO 143	Principles of Anatomy & Physiology III	4
ALH 104	Allied Health Informatics	2
PTA 107	Fundamentals of PTA Practice I	3
	TOTAL	17
SECOND QUARTER		
PTA 118	Movement Science II	5
PTA 120	Pathology & Clinical Practice	5
MAT 101	Elementary Algebra	4
PTA 110	Fundamentals of PTA Practice II	2
	TOTAL	16
THIRD QUARTER		
PTA 134	Tests & Measures	3
PTA 130	Therapeutic Exercise I	4
PTA 124	Clinical Procedures I	5
PHY 100	Introduction to Physics	4
	or	
142	College Physics II	
	TOTAL	16
FOURTH QUARTER		
PTA 221	Clinical Procedures II	2
PTA 223	Therapeutic Exercise II	4
ENG 111	English Composition I	3
PSY 119	General Psychology I	3
	TOTAL	14
FIFTH QUARTER		
PTA 226	Clinical Procedures III	3
PTA 211	Clinical Practicum I	3
PTA 230	Neuroscience for the Physical Therapist Assistant	2
ENG 112	English Composition II	3
	TOTAL	11
SIXTH QUARTER		
PTA 233	Rehabilitation Skills	5
PTA 235	Practice Management	3
COM 206	Interpersonal Communication	3
_____	Humanities Elective*	3
	TOTAL	14
SEVENTH QUARTER		
PTA 213	Clinical Practicum III	3
PSY 208	Life Span Human Development	5
PTA 212	Clinical Practicum II	3
	TOTAL	11

*See page 80.

Career Program

Description

Physical therapist assistants, under the supervision of physical therapists, implement treatment programs for patients of all ages who suffer from disabilities and limitations due to illness, injury, or other causes. PTA 106 needs to be taken prior to admission and is an excellent way for any students trying to determine their suitability for this profession. PTA 106 is offered each quarter, except summer. Upon completion of the program, graduates are eligible to take the national examination for state licensure. Information regarding admission is available from the Allied Health counselors in Room 6120.

Program Prerequisites:

BIO 141 Principles of Anatomy & Physiology I 4 cr. hrs.
 BIO 142 Principles of Anatomy & Physiology II 4 cr. hrs.
 PTA 106 Introduction to Physical Therapy 1 cr. hr.

All DEV courses must be completed if placement requires and 2.5 GPA

Type of Degree or Certificate

Associate of Applied Science

108 Total Credit Hours

Career Opportunities

Because of advanced technology, consumer awareness, and greater utilization of professional services, physical therapy is in demand. Employment may include: rehabilitation centers, public and private schools, community health centers, extended care facilities, college and universities, private industry, hospitals, and sports facilities.

Career Program

Description

Specializing in medical imaging, radiographers perform radiographic examinations that aid the physician in the diagnosis and treatment of injury and disease. Graduates will be eligible to take the national examination offered by the American Registry of Radiologic Technologists. Upon successful completion of the exam, it simultaneously satisfies the Ohio licensure requirements. Accredited by the Joint Review Committee on Education in Radiologic Technology, this eight-quarter program offers two starting dates each year; one in the fall and one in the winter.

Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120.

Required Program Prerequisite:

PHY 100 Introduction to Physics (or high school physics within the past five years)

Recommended Program Prerequisite:

BIO 107 Human Biology

Type of Degree or Certificate

Associate of Applied Science

110 Total Credit Hours

Career Opportunities

Opportunities persist due to technological advances, and the need for proper patient diagnosis. Opportunities exist for technologists in all sections of the U.S., in hospitals, ambulatory imaging centers, private offices, education, equipment manufacturers and suppliers, and in research centers.

Radiologic Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
ALH 103	Introduction to Health Care Delivery	3
ALH 106	Introduction to Basic Health Care Practice	2
ENG 111	English Composition I	3
HIM 121	Basic Medical Terminology	3
MAT 101	Elementary Algebra	4
TOTAL		15
SECOND QUARTER		
ALH 104	Allied Health Informatics	2
ENG 112	English Composition II	3
BIO 131	Radiologic Anatomy & Physiology I	5
RAT 121	Introduction to Radiography & Positioning	4
RAT 131	Patient Care in Radiography	2
TOTAL		16
THIRD QUARTER		
BIO 132	Radiologic Anatomy & Physiology II	5
RAT 111	Clinical Competency Development I	4
RAT 122	Radiographic Positioning	4
RAT 132	Ethics & Law in Medical Imaging	2
TOTAL		15
FOURTH QUARTER		
PHY 106	Physics for Radiologic Technology	5
RAT 112	Clinical Competency Development II	4
RAT 123	Fluoroscopy in Radiography	5
TOTAL		14
FIFTH QUARTER		
COM 206	Interpersonal Communication	3
	Humanities Elective*	3
RAT 215	Pathology for Radiographers	2
SOC 111	General Sociology I	3
TOTAL		11
SIXTH QUARTER		
RAT 212	Clinical Competency Development III	6
RAT 218	Advanced Radiographic Practice	3
RAT 219	Pharmacology for Radiographers	1
RAT 222	Principles of Radiographic Techniques	5
TOTAL		15
SEVENTH QUARTER		
RAT 199	Computers in Medical Imaging	2
RAT 213	Clinical Competency Development IV	8
RAT 231	Sectional Anatomy	2
TOTAL		12
EIGHTH QUARTER		
RAT 214	Clinical Competency Capstone	4
RAT 226	Synopsis in Radiography	2
RAT 229	Quality Management in Medical Imaging	1
RAT 232	Radiation Biology	2
SOC 145	Comparing Cultures	3
TOTAL		12

*See page 80.

Respiratory Care

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIO	107	Human Biology	5
ALH	103	Introduction to Health Care Delivery	3
ALH	106	Introduction to Basic Health Care Practice	<u>2</u>
TOTAL			10
SECOND QUARTER			
RET	110	Respiratory Therapeutics I	5
BIO	125	Cardiopulmonary Anatomy & Physiology	5
ENG	111	English Composition I	<u>3</u>
TOTAL			13
THIRD QUARTER			
RET	120	Respiratory Therapeutics II	4
ENG	112	English Composition II	3
RET	224	Cardiopulmonary Pharmacology	3
	—	Humanities Elective*	<u>3</u>
TOTAL			13
FOURTH QUARTER			
RET	130	Cardiopulmonary Disease Processes	4
RET	140	Adjuncts to Respiratory Care	11
ALH	130	Electrocardiography for the Health Care Provider	<u>1</u>
TOTAL			16
FIFTH QUARTER			
COM	—	Communication Arts Elective	3
PSY	—	Psychology Elective	3
ALH	104	Allied Health Informatics	<u>2</u>
TOTAL			8
SIXTH QUARTER			
RET	230	Respiratory Critical Care I	10
ALH	220	Pathophysiology	<u>4</u>
TOTAL			14
SEVENTH QUARTER			
RET	240	Respiratory Critical Care II	10
RET	250	Pediatrics & Neonatology	<u>3</u>
TOTAL			13
EIGHTH QUARTER			
RET	260	Assessment of Pulmonary Function	3
RET	280	Correlations in Respiratory Care	5
ALH	141	Emergency Cardiac Care (ACLS)	2
RET	—	Portfolio Elective	<u>3</u>
TOTAL			13

*See page 80.

Career Program

Description

Respiratory care practitioners are responsible for the prevention, treatment, management, and rehabilitation of patients of all ages with deficiencies or abnormalities associated with the cardiopulmonary system.

This program is accredited by the Committee on Accreditation for Respiratory Care. Upon completion of the program, graduates are considered eligible and qualified to take the certification and registry examinations, and the specialty examinations for pediatrics/neonatology and pulmonary function technology offered by the National Board for Respiratory Care. Selective admission and additional program information may be obtained from the Allied Health counselors, Room 6120, (937) 512-3029, and from the department chairperson, Room 3340, (937) 512-2268.

Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120.

Program Prerequisites:

HIM 121 Basic Medical Terminology	3 cr. hrs.
MAT 106 Allied Health Mathematics	4 cr. hrs.

Type of Degree or Certificate

Associate of Applied Science

107 Total Credit Hours

Career Opportunities

Respiratory care practitioners work various shifts in full-time, part-time, or pool positions. Job opportunities and salaries vary from region to region. Salaries are competitive with other allied health professions. Advancement is favorable for individuals with technical skill, motivation, and leadership abilities.

Career Program

Description

ALH

Surgical technologists work together with the surgeon, registered nurse, and anesthesiologist as a member of the surgical team. To ensure proper surgical case management, the surgical technologists prepare and pass all sterile instruments during the surgical procedure while maintaining the sterile field and anticipating the needs of the surgeon.

Surgical Technology is a seven-quarter associate degree program accredited by the Commission on Accreditation of Allied Health Education Programs. To enroll in Surgical Technology (SUT) courses, a student must be accepted into the program. The curriculum may be taken on a part-time basis, but Surgical Technology classes must be taken in sequence. A grade of "C" (2.0) must be earned in all required courses, and an overall grade point average of at least 2.0 is necessary for continuance in the program and graduation. The graduates are eligible to take the National Certification Examination for Surgical Technologists. Professional CPR certification is required prior to SUT 111 and must remain current throughout the program.

Allied Health admission packets may be obtained from the office of Admissions (Building 10, Room 10112). Students must submit the Allied Health application form by mail, or in person to Building 6, Room 6120.

Admission requirement:

- High school chemistry or
- CHE 120, or an equivalent course, with a grade of "C" or better within the last five years or
- BIO 107 with a grade of "C" or better

Type of Degree or Certificate

Associate of Applied Science

108 Total Credit Hours

Career Opportunities

The surgical technologist may find employment in hospital operating rooms, delivery rooms, endoscopy units, emergency departments, renal dialysis units, outpatient surgery facilities, surgical clinics, cardiac catheterization laboratories, central processing departments, physician offices, and other settings where invasive therapeutic or diagnostic surgical procedures are performed.

Surgical Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
BIO 161	Surgical Anatomy & Physiology I	5
COM 206	Interpersonal Communication	3
ALH 103	Introduction to Health Care Delivery	3
ENG 111	English Composition I	3
HIM 121	Basic Medical Terminology	3
TOTAL		17
SECOND QUARTER		
BIO 162	Surgical Anatomy & Physiology II	5
PSY 119	General Psychology I	3
SUT 111	Surgical Technology Fundamentals	6
TOTAL		16
THIRD QUARTER		
BIO 205	Microbiology	4
ALH 104	Allied Health Informatics	2
SUT 112	Surgical Process	10
TOTAL		16
FOURTH QUARTER		
ALH 201	Survey of Drug Therapy	2
MAT 106	Allied Health Mathematics	4
SUT 211	Surgical Procedures I	10
TOTAL		16
FIFTH QUARTER		
ALH 220	Pathophysiology	4
ENG 112	English Composition II	3
SUT 212	Surgical Procedures II	10
TOTAL		17
SIXTH QUARTER		
SUT 213	Surgical Procedures III	11
ALH _____	Portfolio Elective	2
TOTAL		13
SEVENTH QUARTER		
	Humanities Elective*	3
SUT 220	Surgical Technology Role Transition	10
TOTAL		13

*See page 80.

Activity Programming

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	125	Basics of Activities Programming	3
		TOTAL	3
SECOND QUARTER			
ALH	135	Administration of Activities Programming	3
		TOTAL	3
THIRD QUARTER			
ALH	155	Issues in Activity Programming	3
		TOTAL	3

Allied Health Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	121	Allied Health Management	3
ALH	230	Quality Management in Health Care	1
ALH	278	Supervisory Applications in Health Care	3
MAN	230	Motivational Concepts & Applications	1
MAN	231	Leadership in Work Groups	1
MAN	232	The Organizational System	1
MAN	237	Human Resource Management	3
		TOTAL	13

Short Term

Description

Meets requirements for the 90-hour training program as put forth by the National Association of Activity Professionals and the National Certification Council for Activity Professionals.

Type of Degree or Certificate

Short Term Certificate

9 Total Credit Hours

ALH

Short Term

Description

This certificate develops the skills needed for individuals currently employed or aspiring to be first-line health care supervisors. Basic skill development includes concepts in leadership, organizational structure, quality improvement, human resources, supervision and management, motivational principles and teamwork.

Type of Degree or Certificate

Short Term Certificate

13 Total Credit Hours

Short Term

Description

This series of courses meets the 270 clock hour chemical dependency specific education required by the Ohio Professional Chemical Dependency Board.

ALH

Type of Degree or Certificate

Short Term Certificate

33 Total Credit Hours

Chemical Dependency Counseling

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
MHT	126	Introduction to Substance Related Disorders	3
MHT	128	Family Dynamics of Chemical Dependency	4
MHT	130	Treatment Techniques in Chemical Dependency	4
MHT	132	Assessment & Diagnosis of Chemical Dependency	4
MHT	136	Ethical Issues in Chemical Dependency	
		Treatment & Prevention	3
		TOTAL	18
SECOND QUARTER			
PSY	214	Drugs & Behavior	4
MHT	138	Dual Diagnosis: Substance Abuse & Mental Illness	3
MHT	139	Substance Abuse Prevention	3
MHT	210	Professional Licensing & Credentialing Processes	3
MHT	209	Treatment Planning	2
		TOTAL	15

Short Term

Description

This course is intended to provide expanded competencies and proficiencies to practicing professionals, students enrolled in health science programs, and entry level skills to accommodate special situation individuals. The students will be required to complete 25 hours of non-paid clinicals during the course. Clinicals for this course are held during the day. Class held in the evenings. Students who complete this course will receive a certificate of completion.

Type of Degree or Certificate

Short Term Certificate

3 Total Credit Hours

Clinical Phlebotomy

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
ALH	111	Clinical Phlebotomy	3
ALH	112	Lab for ALH 111	
		TOTAL	3

Dietary Manager

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
DIT	200	Dining Assistant	1
DIT	203	Medical Nutrition Therapy for Dietary Managers	4
DIT	204	Practicum for DIT 203	3
TOTAL			8
SECOND QUARTER			
DIT	216	Food Preparation & Dietary Service	4
DIT	218	Directed Practice for DIT 216	3
DIT	219	Laboratory for DIT 216	1
TOTAL			8
THIRD QUARTER			
DIT	236	Dietary Organization & Management	4
DIT	237	Directed Practice for DIT 236	3
TOTAL			7

Electrocardiography

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
ALH	107	Introduction to Electrocardiography	3
ALH	108	Lab for ALH 107	
TOTAL			3

Short Term

Description

Approved by the Dietary Managers Association, this certificate program may be applied to the associate degree in dietetics technology. Field experiences are under the direct supervision of a registered dietitian preceptor with at least two years post-registration competency. Students who complete this program are qualified to be the food service directors/supervisors in health care delivery systems. An application for admission may be obtained from the Dietetics & Nutritional Management department, Room 13426 or the Allied Health counselors, Room 6120.

Program Prerequisites:

DEV 065 Developmental Reading 4 cr. hrs.
 DEV 084 Basic Mathematics I 4 cr. hrs.

Type of Degree or Certificate

Short Term Certificate

26 Total Credit Hours

Short Term

Description

This course is intended to provide expanded skills among health care professionals as well as current ALH students to increase marketability for employment. Classes held in the evening with clinicals during the day. Students who complete this course will receive a certificate of completion.

Type of Degree or Certificate

Short Term Certificate

3 Total Credit Hours

ALH

Short Term

Description

Accredited by the Ohio Department of Public Safety, Division of Emergency Medical Services, this two-quarter sequence of courses provides classroom, laboratory, in-hospital, and field clinical experience. A physical examination and specific immunizations are required at the students' expense prior to clinical practicums. The students are required to earn at least a 78 percent on EMS 115 and EMS 116. Following successful completion of EMS 115 and EMS 116, the students are eligible to sit for the Ohio certifying examination for Emergency Medical Technician-Basic. Day and evening classes are available to accommodate work schedules. Admission packets are available from the office of Admissions, Room 10112, or the EMS office.

Type of Degree or Certificate

Short Term Certificate

8 Total Credit Hours

Career Opportunities

EMT-Basics find employment with fire departments, emergency medical services, private ambulance companies, hospitals, and within industry.

EMT-Paramedics are typically employed in the same types of locations. Many EMT's hold other full-time jobs and work with volunteer fire departments and emergency medical services.

Short Term

Description

Accredited by the Ohio Department of Public Safety, Division of Emergency Medical Services, this five-quarter sequence of courses provides classroom, laboratory, in-hospital, and field clinical experience. A physical examination and specific immunizations are required at the students' expense prior to clinical practicums. The students are required to earn at least a 78 percent in paramedic course series. Following successful completion of EMS 135, EMS 136, EMS 137, EMS 138, and EMS 139, the students are eligible to sit for the Ohio certifying examination for Emergency Medical Technician-Paramedic. Day and evening classes are available to accommodate work schedules. Admission packets are available from the office of Admissions, Room 10112 or the EMS office.

Program Prerequisites:

Ohio EMT-Basic Certification, complete health assessment, current CPR card

Type of Degree or Certificate

Short Term Certificate

39 Total Credit Hours

EMT-Basic Certification

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
EMS	115 EMT-Basic Theory & Practice 1 and	5
	116 EMT-Basic Theory & Practice II	2
EMS	117 or EMT-Basic Theory & Practice I & II	8
	118 Lab for EMS 117	
TOTAL		8

EMT-Paramedic Certification

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
EMS	135 EMT-Paramedic I: Introduction to ALS Care	8
EMS	136 EMT-Paramedic II: Cardiovascular & Respiratory Emergencies	8
EMS	137 EMT-Paramedic III: Pediatric & Trauma Emergencies	8
EMS	138 EMT-Paramedic IV: The Medical Patient	8
EMS	139 EMT-Paramedic V: Integration	7
TOTAL		39

Expanded Functions for Dental Auxiliaries

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
DEH	104	Dental Anatomy for Dental Auxiliaries	2
DEH	247	Expanded Functions for Dental Auxiliary I	6
DEH	248	Expanded Functions for Dental Auxiliary II	6
DEH	249	Expanded Functions for Dental Auxiliary III	6
TOTAL			20

Medical Office Coding Specialist

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	103	Introduction to Health Care Delivery	3
BIO	107	Human Biology	5
TOTAL			8
SECOND QUARTER			
ALH	104	Allied Health Informatics	2
HIM	121	Basic Medical Terminology	3
TOTAL			5
THIRD QUARTER			
HIM	122	Specialized Medical Terminology	3
HIM	260	ICD-9-CM Medical Office Coding	3
HIM	261	CPT Medical Office Coding	3
MAS	202	Insurance & Patient Records	3
TOTAL			12
FOURTH QUARTER			
HIM	262	Advanced Medical Office Coding	4
TOTAL			4

Short Term

Description

The Expanded Functions for Dental Auxiliaries program is designed to prepare Certified Dental Assistants or Licensed Dental Hygienists to take the Expanded Functions for the Dental Auxiliary (EFDA) board examination administered by the Commission on Dental Testing in Ohio and to provide quality restorative patient care.

This course includes 180 hours of instruction, progressing from the preclinical laboratory activities to clinical experience. This course is offered ONLY to Licensed Dental Hygienists and Certified Dental Assistants. Proof of current licensure/certification must be submitted with application.

Instruction includes lecture/demonstration and laboratory activities. Didactic instruction includes review of tooth morphology, instrumentation and ergonomic principles, properties and manipulation of dental restorative materials, and techniques and procedures for restoring teeth with amalgam and tooth colored direct restorations.

Type of Degree or Certificate

Short Term Certificate

20 Total Credit Hours

Short Term

Description

This certificate provides students with a core set of medical office skills in coding and reimbursement to: read and interpret medical documentation (diagnoses, conditions, services and procedures); apply coding systems and regulatory rules in completing billing forms; apply reimbursement methodologies and claims; demonstrate personal behaviors, attitudes and values consistent with a health care professional; demonstrate critical thinking and problem solving; and demonstrate informational literacy.

Type of Degree or Certificate

Short Term Certificate

29 Total Credit Hours

Career Opportunities

Prospects are excellent in the Miami Valley and throughout the nation. Job opportunities include: physician offices, ambulatory care centers, urgent care centers, medical billing companies, long term care centers, home health care agencies, and insurance and managed care companies.

ALH

Short Term

Description

The Multi-Skilling Health Care certificate offers a flexible, innovative curriculum designed to meet the needs of a changing health care marketplace. In this program, the students will complete all of the core courses and select classes from two clusters. Completion of placement testing in math, reading and writing is required prior to beginning this program, and developmental courses may be required based on test scores.

ALH

Type of Degree or Certificate

Short Term Certificate

23-44 Total Credit Hours

Multi-Skilling Health Care

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	103	Introduction to Health Care Delivery	3
BIO	107	Human Biology	5
ALH	—	Allied Health Cluster	<u>1-8</u>
TOTAL			9-16
SECOND QUARTER			
ALH	104	Allied Health Informatics	2
ALH	140	Basic Life Support Training	1
HIM	121	Basic Medical Terminology	3
ALH	—	Allied Health Cluster	<u>1-8</u>
TOTAL			7-14
THIRD QUARTER			
ENG	131	Business Communications I	3
		or	
	111	English Composition I	
COM	206	Interpersonal Communication	3
ALH	—	Allied Health Cluster	<u>1-8</u>
TOTAL			7-14
CLUSTERS			
Diagnostic Procedures			
ALH	111	Clinical Phlebotomy	3
ALH	107	Principles of EKG	3
RAT	104	Radiological Principles for GMO	4
Patient Care			
ALH	120	Nurse Aide Training	6
ALH	131	Patient Care Assistant	
		or	
	133	Pediatric Patient Care Assistant	6
Health Unit Coordinator			
MAS	120	Health Unit Coordinator I	4
MAS	121	Health Unit Coordinator II	3
HIM	122	Specialized Medical Terminology	3
BIS	101	Personal Computer Keyboarding	2

Pharmacy Technician

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	122	Pharmacy Technician I	5
HIM	121	Basic Medical Terminology	3
BIO	107	Human Biology	5
ALH	103	Introduction to Health Care Delivery	3
			TOTAL
			16
SECOND QUARTER			
ALH	123	Pharmacy Technician II	5
ALH	142	Fundamentals of Disease Processes	4
BIS	101	Personal Computer Keyboarding	2
MAT	106	Allied Health Mathematics	4
			TOTAL
			15
THIRD QUARTER			
ALH	124	Pharmacy Technician III	5
ALH	113	Venipuncture for Health Care Providers	1
ALH	104	Allied Health Informatics	2
ALH	140	Basic Life Support Training	1
ENG	131	Business Communications I	3
			TOTAL
			12

Tissue Banking Technologist

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
HIM	121	Basic Medical Terminology	3
SUT	100	Introduction to Tissue Banking	5
			TOTAL
			8
SECOND QUARTER			
MAT	106	Allied Health Mathematics	4
ENG	131	Business Communications I	3
SUT	101	Tissue Banking I	5
			TOTAL
			12
THIRD QUARTER			
SUT	201	Tissue Banking II	8
SUT	202	Tissue Bank Certification Review	4
			TOTAL
			12

Short Term

Description

This program prepares individuals to perform the technical and specialized skills of a pharmacy technician within retail and mail order settings, hospital pharmacies, nursing homes and home health care sites. The program is designed to develop knowledge and understanding of basic pharmacology, maintenance of patient records, drug-product preparation and distribution, and recordkeeping. A portion of this program will involve on-site internships at participating pharmacies. Upon completion of the program students may take the Pharmacy Tech Board Examination I.

Type of Degree or Certificate

Short Term Certificate

43 Total Credit Hours

Career Opportunities

Employment prospects for the pharmacy technicians are excellent in the Miami Valley and throughout the nation. Job opportunities are available in the following areas: retail and mail order settings, hospital pharmacies, nursing homes and home health care settings.

Short Term

Description

Completion of this three quarter certificate program prepares individuals to attain the skills necessary to become a certified tissue banking technologist. Tissue banking technologists are integral in the recovery, processing, storage, and distribution of human tissue. Students will gain basic knowledge of human anatomy, medical terminology, sterile technique, surgical recovery and processing techniques, ethics, and regulatory standards. Students will also be eligible to take the national CTBS (certified tissue banking specialist) exam upon program completion.

Program Prerequisite:

- BIO 107 Human Biology

Type of Degree or Certificate

Short Term Certificate

32 Total Credit Hours

ALH

Specialized Courses

Description

This specialized course is designed to meet the standards set by the Ohio Department of Health for extended care facilities.

Type of Degree or Certificate

Specialized Courses

3 Total Credit Hours

Basics of Activities Programming

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title

ALH 125 Basics of Activities Programming

Credit Hours
3

Specialized Courses

Description

The Nurse Aide Training (NAT) program prepares the student to become a nurse aide in Ohio's long term care facilities. The program is balanced between classroom and clinical skills training and provides a meaningful, practical skill development opportunity. At the conclusion of the NAT program, the nurse aide will receive a certificate and be eligible to take the required written and skills state certification test.

Prerequisite:

DEV 065 Developmental Reading
DEV 075 Fundamentals of English
DEV 085 Basic Mathematics II or equivalents

Type of Degree or Certificate

Specialized Courses

6 Total Credit Hours

Nurse Aide Training

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title

ALH 120 Nurse Aide Training

Credit Hours
6

Business Technologies



I like the accessibility Sinclair gives students for receiving tutorial sessions if needed.

— Janie Fairley

Departments

BUS

Getting Started in Business

Business Technologies division degree and certificate programs prepare students for some of the most sought after jobs in the market place, whether students are right out of high school, changing careers, or already employed. Sinclair offers comprehensive two-year degree programs that provide opportunities for students to gain hands-on and real business experience through projects and internships. The short term certificate programs include many areas of specialization to meet particular needs. Whether students want to:

- own a restaurant or cook the meals
- manage a computer network or develop web pages
- become an accountant or verify financial data
- manage an office or supervise a call center
- plan corporate events or a travel itinerary
- market products or manage people
- become a paralegal or a human resource specialist
- own their own business
- advance in their careers
- upgrade skills

Sinclair Business technologies has a course or program for you!

Sinclair's Business Administration University Parallel program allows students to complete the first two years of a bachelor's degree program at an affordable price and provides a seamless transfer to numerous area and online colleges. **Students completing this program have statistically shown to be very successful at their transfer college.**

The Business Technologies division teaches the latest technical skills and business competencies. No matter what career field, taking courses in the Business Technologies division will assist students to become more employable. Nearly every career field requires computer technology and strong customer service skills. Learning to be a better manager or to handle a budget more effectively can give students the edge needed to stand out when applying for that next position.

Visit experienced academic counselors in Building 6131 or call (937) 512-3054 to find out what **programs or courses will help reach career goals!**

Academic Advising Office Hours

Monday-Thursday
8:00 a.m. - 7:00 p.m.

Friday
8:00 a.m. - 5:00 p.m.
(4:30 p.m. in summer)

Building 6, First Floor
(937) 512-3700

Business Technologies

University Parallel Transfer Degree Programs

The University Parallel Transfer degree program, also referred to as a "2+2" degree, is designed for students who want to pursue a baccalaureate degree at a four-year institution in a business discipline. After completing the basic core of business and general education requirements during the first two years at Sinclair Community College, students would transfer to a four-year institution to complete the final two years for the bachelor's degree.

What Is a University Parallel Degree?

- Designed to provide transfer to a four-year institution rather than job preparation
- Sinclair students complete core Business and general education requirements for the first two years of a four-year program
- A University Parallel program produces an Associate of Science degree providing students with junior status upon transfer
- Articulation agreements have been developed with specific four-year institutions and become a part of the Sinclair Guarantee and satisfy the Ohio Transfer Module
- Completing the Transfer Module at Sinclair prior to transferring to a four-year institution, guarantees completion of the Transfer Module requirements at any state college or university in the state of Ohio
- Students who wish to transfer to institutions other than those listed, should follow the basic Business Administration program. **However, it is strongly suggested that students contact the intended transfer school to secure written verification of course application.**

Charlotte Wharton, Interim Dean
(937) 512-2917, Room 6110

Sharyn Morgan
Academic Counselor
(937) 512-3054, 6131B

Meredith A. Rainey
Academic Counselor
(937) 512-3054, Room 6131A

Gordon Robinson
Professor, Academic Counselor
(937) 512-3054, Room 6131C

Accounting
Richard Andrews, Chairperson
(937) 512-2616, Room 5141C

Business Information Systems
Cheryl Reindl-Johnson, Chairperson
(937) 512-2892, Room 5111E

Computer Information Systems
Chairperson
(937) 512-2892, Room 5111F

Economics/Financial Management/Real Estate/Entrepreneurship
Jeff Vance, Chairperson
(937) 512-2615, Room 5142A

Hospitality Management/Travel & Tourism
Steve Cornelius, Chairperson
(937) 512-5197, Room 13420B

Law/Paralegal
Bonnie S. Shane, Chairperson
(937) 512-2616, Room 5141A

Management/Marketing
Dr. Ned D. Young, Chairperson
(937) 512-2615, Room 5142B

Articulation Agreements

The following represents a partial listing of the available articulation agreements. Please be sure to ask for the most current listing from the counseling office in the Business Technologies division.

Business Administration (A.S. degree)

Central State University
University of Cincinnati
University of Dayton
Urbana University
Wilberforce University
Wright State University
Xavier University

Business Administration with Special Emphases

Wright State University

- Computer Science with Business Option
- Integrated Business Education

University of Dayton

- Management Information Systems

University of Cincinnati

- Information Systems
- Paralegal Studies

Urbana University

- Computer Information Systems

Adult Transfer Opportunities for A.A.S. Degrees

- Visit Business Technologies division web site "Transfer Opportunities" at www.sinclair.edu/academics/bus.

Business Administration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ACC	121	Principles of Financial Accounting	5
ENG	111	English Composition I	3
MAN	105	Introduction to Business	3
MAT	116	College Algebra	5
			TOTAL
			16
SECOND QUARTER			
ACC	122	Principles of Managerial Accounting	5
ENG	112	English Composition II	3
MAT	218	Calculus for Business & Economics	5
	—	PSY/SOC Elective	3
	—	Humanities Elective*	3
			TOTAL
			19
THIRD QUARTER			
ENG	113	English Composition III	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
	—	PSY/SOC Elective	3
	—	Humanities Elective*	3
	—	PSY/SOC Elective	3
			TOTAL
			15
FOURTH QUARTER			
	—	Ohio Transfer Module Natural/Physical Sciences	4
COM	211	Effective Speaking I	3
MAT	122	Statistics I	4
	—	Humanities Elective*	3
			TOTAL
			14
FIFTH QUARTER			
	—	Ohio Transfer Module Natural/Physical Sciences	4
ECO	216	Principles of Macroeconomics	4
	—	General Education Elective*	9
			TOTAL
			17
SIXTH QUARTER			
	—	Ohio Transfer Module Natural/Physical Sciences	4
ECO	218	Principles of Microeconomics	4
	—	General Education Elective*	9
			TOTAL
			17

*See page 80.

University Parallel

Description

The University Parallel or Transfer programs are designed for the students who want to pursue a baccalaureate degree at a four-year institution in a business discipline. The purpose for the transfer degree program is to provide the basic core of business and general education requirements for the first two years of a four-year program.

Type of Degree or Certificate

Associate of Science

98 Total Credit Hours

Career Opportunities

The primary objective of these programs is to provide for transfer to a four-year institution rather than preparation for a job. Provides first two years of a four-year degree.

BUS

Career Program

Description

Accountants prepare, analyze, and verify financial reports, and monitor information systems that furnish this information to managers. Managers such as business executives, bankers, government leaders, and investors all rely on financial statements and other reports prepared by accountants to summarize and interpret the multitude of financial transactions that occur in every business. Accountants must have the ability to develop and present understandable and reliable analyses of business operations which can be used in making business decisions.

Students study the responsibilities of an accountant, giving insight into a business organization. Employment opportunities exist in private business and industry, government, and independent accounting firms. Positions available to graduates include accountant, cost accountant, payroll accountant, auditor, tax accountant, and financial analyst.

Students who complete the accounting program can qualify to sit for the CPA exam in Ohio. They will need to complete a few additional courses and a qualifying exam (or exams) that are determined by the Ohio Board of Accountancy.

Type of Degree or Certificate

Associate of Applied Science

104 Total Credit Hours

Career Opportunities

Graduates will be prepared to fill various entry level accounting positions in public accounting, industry, and governmental organizations. These positions may be in general accounting, auditing, payroll, accounts receivable, accounts payable, finance, product costing, or taxes.

Accounting

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
ACC	121	Principles of Financial Accounting	5
MAT	116	College Algebra	5
		or	
	121	Mathematics for Business Analysis	
MAN	105	Introduction to Business	3
		TOTAL	16
SECOND QUARTER			
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
MAT	122	Statistics I	4
ACC	122	Principles of Managerial Accounting	5
BIS	160	Introduction to Word, PowerPoint, & Excel	3
		Humanities Elective*	3
		TOTAL	18
THIRD QUARTER			
ACC	125	Personal Computer Applications in Accounting	3
FIN	215	Corporation Finance	3
		Business Elective	3
ECO	216	Principles of Macroeconomics	4
LAW	101	Business Law I	4
		TOTAL	17
FOURTH QUARTER			
ACC	201	Intermediate Accounting I	3
ACC	211	Cost Accounting I	3
ACC	240	Microcomputer Accounting Systems	3
ECO	218	Principles of Microeconomics	4
LAW	102	Business Law II	4
		TOTAL	17
FIFTH QUARTER			
ACC	202	Intermediate Accounting II	3
ACC	212	Cost Accounting II	3
ACC	270	Accounting Internship	3
		or	
		Business Elective	
ACC	221	Federal Taxes I	3
MAN	205	Principles of Management	3
MRK	201	Marketing I	3
		TOTAL	18
SIXTH QUARTER			
ACC	203	Intermediate Accounting III	3
ACC	235	Auditing Theory & Practice	3
ACC	222	Federal Taxes II	3
MAN	255	Management Information Systems I	3
ACC	270	Accounting Internship	3
		or	
		Business Elective	
COM	211	Effective Public Speaking	3
		or	
	225	Small Group Communication	
		TOTAL	18

*See page 80.

Business Information Systems

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I or	3
	131	Business Communications I	
BIS	M85	Microsoft Word	2
MAN	205	Principles of Management	3
COM	206	Interpersonal Communication or	3
	285	Business & Professional Communication	
BIS	105	Computer Concepts	3
			<u>3</u>
TOTAL			14
SECOND QUARTER			
ENG	112	English Composition II or	3
	132	Business Communications II	
MAT	105	Business Mathematics	4
LAW	101	Business Law I	4
BIS	102	Document Formatting	2
BIS	M45	Microsoft Excel	2
BIS	M75	The Internet	1
			<u>1</u>
TOTAL			16
THIRD QUARTER			
ENG	199	Text Editing	3
ACC	121	Principles of Accounting I	5
BIS	M55	Microsoft PowerPoint	2
BIS	M86	Advanced/Expert Word	2
ECO	216	Microeconomics	4
			<u>4</u>
TOTAL			16
FOURTH QUARTER			
BIS	115	Work Place Technologies	2
BIS	M35	Microsoft Access	2
BIS	103	Advanced Document Formatting/Skillbuilding	4
CIS	130	Introduction to Web Development	3
BIS	M25	Desktop Publishing	2
	—	Humanities Elective*	3
			<u>3</u>
TOTAL			16
FIFTH QUARTER			
BIS	215	Office Applications Practicum/Seminar	4
BIS	201	Customer Service	3
BIS	M46	Advanced/Expert Excel	2
BIS	M36	Advanced/Expert Access	3
BIS	207	Telecommunications	2
	—	Business Elective	3
			<u>3</u>
TOTAL			17
SIXTH QUARTER			
BIS	172	Integrated Solutions	2
BIS	202	Advanced Customer Service Concepts	3
BIS	114	Records Management & Electronic Files	3
BIS	270	Office Technology Applications Internship	3
	—	Business Elective	3
	—	General Education Elective*	3
			<u>3</u>
TOTAL			17

*See page 80.

Career Program

Description

Current and future industry/business needs require information technology support staff competent in a number of software programs and capable of integrating applications to be more productive. Support staff members, as well as all information technology workers, are required to work in teams, actively participate as customer service agents, and use new technologies to maximize business productivity. Employment opportunities continue to grow in all businesses, governmental agencies, and industries both large and small.

Type of Degree or Certificate

Associate of Applied Science

96 Total Credit Hours

Career Opportunities

Employment opportunities are available in many types of businesses, including banks, insurance offices, advertising agencies, manufacturing companies, small business, and educational institutions, to name a few.

Career Program

Description

Current and future industry/business needs require information technology support staff competent in a number of software programs and capable of integrating applications to be more productive. Accounting office support staff members, as well as all information technology workers, are required to work in teams, actively participate as customer service agents, and use new technologies to maximize accounting office productivity.

Type of Degree or Certificate

Associate of Applied Science

97 Total Credit Hours

Career Opportunities

Employment opportunities include account secretaries in accounting departments in private businesses and industries, educational institutions, and other governmental agencies.

Business Information Systems

Accounting Office Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	131	Business Communications I	3
		or	
	111	English Composition I	
BIS	M85	Microsoft Word	2
MAN	205	Principles of Management	3
COM	206	Interpersonal Communication	3
		or	
	285	Business & Professional Communication	
MAT	105	Business Mathematics	4
		TOTAL	15
SECOND QUARTER			
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
ACC	121	Principles of Financial Accounting	5
BIS	M45	Microsoft Excel	2
ECO	216	Principles of Macroeconomics	4
BIS	102	Document Formatting	2
		TOTAL	16
THIRD QUARTER			
ENG	199	Text Editing	3
ACC	122	Principles of Managerial Accounting	5
BIS	M55	Microsoft Powerpoint	2
BIS	M86	Advanced/Expert Word	2
LAW	101	Business Law I	4
		TOTAL	16
FOURTH QUARTER			
		Accounting Elective	3
BIS	115	Work Place Technologies	2
BIS	103	Advanced Document Formatting/Skillbuilding	4
BIS	114	Records Management & Electronic Files	2
BIS	M35	Microsoft Access	3
		Humanities Elective*	3
		TOTAL	17
FIFTH QUARTER			
ACC	125	Personal Computer Applications in accounting	3
BIS	M75	The Internet	2
BIS	215	Office Applications Practicum/Seminar	4
BIS	M46	Advanced/Expert Excel	2
BIS	201	Customer Service	3
		Business Elective	3
		TOTAL	17
SIXTH QUARTER			
BIS	172	Integrated Solutions	2
BIS	202	Advanced Customer Service Concepts	3
BIS	207	Telecommunications	2
BIS	270	Business Information Systems Internship	3
		General Education Elective*	3
		Business Elective	3
		TOTAL	16

*See page 80.

Business Information Systems

Legal Office Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	M45	Microsoft Excel	2
BIS	M85	Microsoft Word	2
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
MAN	205	Principles of Management	3
COM	206	Interpersonal Communication	3
		or	
	285	Business & Professional Communication	
MAT	105	Business Mathematics	4
			<u>4</u>
TOTAL			17
SECOND QUARTER			
BIS	M86	Advanced/Expert Word	2
BIS	M75	The Internet	2
ENG	132	Business Communications II	3
		or	
	112	English Composition II	
LAW	101	Business Law I	4
BIS	102	Document Formatting	2
ECO	216	Principles of Macroeconomics	4
			<u>4</u>
TOTAL			17
THIRD QUARTER			
ACC	121	Principles of Financial Accounting	5
BIS	M55	Microsoft PowerPoint	2
ENG	199	Text Editing	3
PAR	106	Paralegal Principles: Technology	2
PAR	105	Paralegal Principles	4
			<u>4</u>
TOTAL			16
FOURTH QUARTER			
BIS	M35	Microsoft Access	2
BIS	114	Records Management & Electronic Files	3
BIS	115	Work Place Technologies	2
PAR	220	Legal Ethics	3
	—	Law Elective	3
	—	Humanities Elective*	3
			<u>3</u>
TOTAL			16
FIFTH QUARTER			
BIS	M36	Advanced/Expert Access	3
BIS	143	Introduction to Transcription and Legal Terms	4
BIS	M46	Advanced/Expert Excel	2
BIS	215	Office Applications Practicum/Seminar	4
BIS	201	Customer Service	3
PAR	247	Legal Technology Resources	1.5
			<u>1.5</u>
TOTAL			17.5
SIXTH QUARTER			
BIS	172	Integrated Solutions	2
BIS	202	Advanced Customer Service Concepts	3
BIS	207	Telecommunications	2
BIS	270	Business Information Systems Internship	3
	—	Business Elective	3
			<u>3</u>
TOTAL			13

*See page 80.

Career Program

Description

Current and future industry/business needs require information technology support staff competent in a number of software programs and capable of integrating applications to be more productive. Legal office support staff members, as well as all information technology workers, are required to work in teams, actively participate as customer service agents, and use new technologies to maximize legal office productivity.

Type of Degree or Certificate

Associate of Applied Science

96.5 Total Credit Hours

Career Opportunities

Employment opportunities include legal secretaries, executive secretaries, and legal clerks in law firms, legal offices, and legal departments within corporations.

Career Program

Description

Current and future industry/business needs require information technology support staff competent in a number of software programs and capable of integrating applications to be more productive. Medical office support staff members, as well as all information workers, are required to work in teams, actively participate in patient customer service, and use new technologies to maximize medical office productivity.

Type of Degree or Certificate

Associate of Applied Science

100 Total Credit Hours

Career Opportunities

Employment opportunities include medical office receptionists, secretaries, billing/insurance clerks, transcriptionists, and medical office administrators in physicians' offices, urgent care centers, managed care organizations, research facilities, laboratories, nursing homes, and hospitals.

Business Information Systems Medical Office Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
BIS	M85	Microsoft Word	2
MAN	205	Principles of Management	3
COM	206	Interpersonal Communication	3
		or	
	285	Business & Professional Communication	
BIS	136	Introduction to Medical Terminology	4
BIS	M55	Microsoft Powerpoint	2
		TOTAL	17
SECOND QUARTER			
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
MAT	105	Business Mathematics	4
BIS	137	Intermediate Medical Terminology	4
BIS	102	Document Formatting	2
BIS	M45	Microsoft Excel	2
BIS	M75	The Internet	2
		TOTAL	17
THIRD QUARTER			
ACC	121	Principles of Accounting I	5
ENG	199	Text Editing	4
BIS	M35	Microsoft Access	2
BIS	114	Records Management & Electronic Files	3
BIS	138	Advanced Medical Terminology	4
		TOTAL	18
FOURTH QUARTER			
BIS	201	Customer Service	3
BIS	115	Work Place Technologies	2
BIS	M86	Advanced/Expert Word	2
BIS	251	Medical Transcription I	4
HIM	260	ICD-9-CM Medical Office Coding	3
ECO	216	Microeconomics	4
		TOTAL	18
FIFTH QUARTER			
BIS	215	Office Applications Practicum/Seminar	4
BIS	252	Medical Transcription II	4
BIS	116	Medical Office Procedures	4
HIM	261	CPT Medical Office Coding	3
		TOTAL	15
SIXTH QUARTER			
BIS	202	Advanced Customer Service Concepts	3
BIS	270	Business Information Systems Internship	3
		Humanities Elective*	3
BIS	207	Telecommunications	2
LAW	101	Business Law I	4
		TOTAL	15

*See page 80.

Business Information Systems

Personal Computer Applications

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	M75	The Internet	2
BIS	M85	Microsoft Word	2
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
COM	206	Interpersonal Communication	3
		or	
	285	Business & Professional Communication	
BIS	105	Computer Concepts	3
MAT	105	Business Mathematics	4
		TOTAL	17
SECOND QUARTER			
BIS	M45	Microsoft Excel	2
BIS	102	Document Formatting	2
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
LAW	101	Business Law I	4
ECO	216	Principles of Macroeconomics	4
		TOTAL	15
THIRD QUARTER			
ACC	121	Principles of Financial Accounting	5
BIS	M25	Desktop Publishing	2
BIS	M86	Advanced/Expert Word	2
BIS	115	Work Place Technologies	2
CIS	107	Introduction to Operating Systems	3
		Humanities Elective*	3
		TOTAL	17
FOURTH QUARTER			
CIS	130	Introduction to Web Development	3
BIS	M35	Microsoft Access	2
BIS	M55	Microsoft PowerPoint	2
BIS	M81	Intermediate Microsoft Project	1
BIS	M82	Intermediate Microsoft Project	1
ACC	125	Personal Computer Applications in Accounting	3
MAN	205	Principles of Management	3
		TOTAL	15
FIFTH QUARTER			
		Computer Information Systems Elective	3
BIS	M46	Advanced/Expert Excel	2
BIS	201	Customer Service	3
BIS	114	Records Management & Electronic Files	3
BIS	207	Telecommunications	2
		General Education Elective*	3
		TOTAL	16
SIXTH QUARTER			
CIS	265	Database Management Systems	3
BIS	M36	Advanced/Expert Access	3
BIS	172	Integrated Solutions	2
BIS	202	Advanced Customer Service Concepts	3
BIS	270	Business Information Systems Internship	3
CIS	162	Microsoft Office Troubleshooting & Problem Solving	3
		TOTAL	17

*See page 80.

Career Program

Description

Current and future industry/business needs require information technology support staff competent in a number of software programs and capable of integrating applications to be more productive. This program combines Business Information Systems (BIS) courses with Computer Information Systems (CIS) courses to develop students' skills in computer application software, troubleshooting software, and operating systems.

Type of Degree or Certificate

Associate of Applied Science

97 Total Credit Hours

Career Opportunities

Employment opportunities include para-professional positions in information technology, online customer service, and personal computer software application troubleshooting.

Career Program

Description

Management professionals work with people and other resources to accomplish an organization's goals. They assume a broad range of responsibilities and roles, from first-line supervision to mid-level coordination of organizational planning and operations with strategic planning executives. Managers excel in abstract logic and reasoning, computational expertise, communication, interpersonal activities and teamwork. This program emphasizes preparation for a wide variety of management related positions. It is designed to provide a balance in technical business education along with general education courses while providing a considerable choice of electives and alternatives.

Type of Degree or Certificate

Associate of Applied Science

103 Total Credit Hours

Career Opportunities

Opportunities for managers include supervision, office managers, management trainees, assistant managers and owners within a variety of settings, including small and medium-size businesses, corporations, industries, non-profit organization, and governmental agencies.

Business Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
MAN	201 Introduction to Supervision	3
MAN	105 Introduction to Business	3
ENG	111 English Composition I	3
	or	
	131 Business Communications I	
MAT	116 College Algebra	5
	or	
	121 Mathematics for Business Analysis	
_____	General Education Elective*	3
	TOTAL	17
SECOND QUARTER		
ACC	21 Principles of Financial Accounting	5
BIS	160 Introduction to Word, PowerPoint, & Excel	3
ENG	112 English Composition II	3
	or	
	132 Business Communications II	
MAN	205 Principles of Management	3
MAT	122 Statistics I	4
	TOTAL	18
THIRD QUARTER		
ACC	121 Principles of Managerial Accounting	5
COM	211 Effective Speaking I	3
MAN	225 Human Relations & Organizational Behavior	3
MRK	201 Marketing I	3
ECO	216 Principles of Macroeconomics	4
	TOTAL	18
FOURTH QUARTER		
COM	206 Interpersonal Communication	3
MAN	216 Managing Operations	3
MRK	202 Marketing II	3
PUR	201 Purchasing Principles	3
	or	
	Management Elective	
ECO	218 Principles of Microeconomics	4
	TOTAL	16
FIFTH QUARTER		
MAN	110 Introduction to International Business	3
LAW	101 Business Law I	4
MAN	255 Management Information Systems I	3
MAN	295 Management Seminar	3
_____	Management Elective	3
	TOTAL	16
SIXTH QUARTER		
	General Education Elective*	3
MAN	270 Management Internship	9
	or	
	Business Elective	
MAN	278 Management Capstone	3
_____	Humanities Elective*	3
	TOTAL	18

*See page 80.

Business Management Entrepreneurship Concentration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	160	Introduction to Word, PowerPoint, & Excel	3
ENG	111	English Composition I	3
	131	or Business Communications I	
ENT	105	Introduction to Entrepreneurship	3
MAT	116	College Algebra	5
	121	or Mathematics for Business Analysis	
SOC	111	General Sociology I	3
			TOTAL
			17
SECOND QUARTER			
BIS	161	Intermediate Word, PowerPoint, & Excel	3
ENG	112	English Composition II	3
	132	or Business Communications II	
ENT	210	Small Business Management	3
MAT	122	Statistics I	4
MRK	201	Marketing I	3
			TOTAL
			16
THIRD QUARTER			
ACC	121	Principles of Financial Accounting	5
COM	211	Effective Speaking I	3
ENT	220	Small Business Marketing	3
LAW	101	Business Law I	4
MAN	205	Principles of Management	3
			TOTAL
			18
FOURTH QUARTER			
ACC	122	Principles of Managerial Accounting	5
BIS	M35	Microsoft Access	2
MAN	110	Introduction to International Business	3
MAN	201	Introduction to Supervision	3
	—	Business Elective	3
			TOTAL
			16
FIFTH QUARTER			
COM	206	Interpersonal Communication	3
ECO	216	Principles of Macroeconomics	4
ENT	240	Small Business Finance	3
MAN	216	Managing Operations	3
SOC	214	Applied Population Demography	3
			TOTAL
			16
SIXTH QUARTER			
ECO	218	Principles of Microeconomics	4
ENT	260	Business Plan Development	4
ENT	278	Entrepreneurship Capstone	1
MRK	236	Consumer Behavior	3
	—	Business Elective	3
	—	Humanities Elective*	3
			TOTAL
			18

*See page 80.

Career Program

Description

This area of concentration within the Management program prepares existing or potential entrepreneurs in wide variety of small business functions. In addition to general education courses and traditional management courses, the following key areas are emphasized for entrepreneurs: opportunity analysis, steps to becoming an entrepreneur, organizational structure, marketing plan development, financial plan development, and the complete business plan development.

Type of Degree or Certificate

Associate of Applied Science

101 Total Credit Hours

Career Opportunities

Opportunities for entrepreneurs are not limited to just self-employment, as many small "entrepreneurial" firms hire like-minded employees that understand and thrive in the higher risk environment of small enterprise.

Career Program

Description

The rapid spread of computers and computer-based technologies over the past two decades has generated a need for skilled, highly trained workers in programming positions. Students in the Computer Information Systems program are provided technical skills for entry level information systems positions. Students are prepared in the areas of flowcharting and documenting structured programs, network administration, microcomputer and network operating systems, and business applications using computer languages such as Visual Basic.NET, Java, and C++. Students learn to use commercially available network and application software on local area networks and microcomputers. Employment opportunities in this expanding field include entry level positions such as programmers, web developers, help desk analysts, network administrators, user support specialists, and network engineers.

Program Prerequisites:

BIS 105 Computer Concepts and
MAT 101 Elementary Algebra and

EBE 170 if planning to complete CIS 270 Internship.

Type of Degree or Certificate

Associate of Applied Science

104-105 Total Credit Hours

Career Opportunities

Employment opportunities in this expanding field include entry level positions such as programmers, web developers, P.C. repair technicians, information center specialists, network administrators, data base analysts, and help desk specialists.

Concentration Electives***

CIS 206	Network Security I	3
CIS 207	Network Security II	3
CIS 253	Securing a Windows Network Environment	4
CIS 257	Microsoft Internet Security & Acceleration (ISA) Server	4
CIS 259	Designing Security for Windows Networks	4
CIS 271	Administering a Microsoft Windows Client	4
CIS 272	Microsoft Windows Server Operating System	4
CIS 273	Managing a Windows Network Infrastructure	4
CIS 274	Windows Directory Services Administration	4

Computer Information Systems

Microsoft Security Specialist Concentration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	100	CIS Student Orientation for Success	2
BIS	160	Introduction to Word, PowerPoint, & Excel	3
	161	or	
	161	Intermediate Word, PowerPoint, & Excel	
ENG	131	Business Communications I	3
		or	
	111	English Composition I	
MAT	121	Mathematics for Business Analysis	5
		or	
	116	College Algebra	
CIS	107	Introduction to Operating Systems	3
		TOTAL	<u>16</u>
SECOND QUARTER			
CIS	111	Introduction to Problem Solving & Computer Programming	4
CIS	225	Operating Systems Troubleshooting	3
MAT	122	Statistics I	4
ENG	132	Business Communications II	3
		or	
	112	English Composition II	
CIS	230	Computer Networks	3
		TOTAL	<u>17</u>
THIRD QUARTER			
COM	225	Small Group Communication	3
CIS	272	Microsoft Windows Server Operating System***	4
CIS	271	Administering a Microsoft Windows Client Operating System***	4
CIS	266	Client/Server Database	3-4
		or	
	265	Database Management Systems	
COM	206	Interpersonal Communication	3
		TOTAL	<u>17-18</u>
FOURTH QUARTER			
CIS	210	Computer Systems Analysis	3
CIS	273	Managing a Windows Network Infrastructure***	4
CIS	274	Windows Directory Services Administration***	4
LAW	101	Business Law I	4
MAN	205	Principles of Management	3
		TOTAL	<u>18</u>
FIFTH QUARTER			
ACC	121	Principles of Financial Accounting	5
ECO	216	Principles of Macroeconomics	4
CIS	253	Securing a Windows Network Environment***	4
CIS	206	Network Security I***	3
		Business Elective	3
		or	
CIS	270	CIS Internship	
		TOTAL	<u>19</u>
SIXTH QUARTER			
CIS	207	Network Security II***	3
MRK	201	Marketing I	3
		Humanities Elective*	3
CIS	259	Designing Security for Windows Networks**	4
		or	
	257	Microsoft Internet Security & Acceleration (ISA) Server**	
CIS	278	CIS Capstone	4
		TOTAL	<u>17</u>

* See page 80.

** Internet elective see page 126.

***Concentration electives

Computer Information Systems Network Engineer Concentration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
BIS 160 Introduction to Word, PowerPoint, & Excel or 161 Intermediate Word, PowerPoint, & Excel	3
CIS 107 Introduction to Operating Systems or 108 Introduction to Windows OS for the Network Manager	3
ENG 111 English Composition I or 131 Business Communications I	3
MAT 116 College Algebra or 121 Mathematics for Business Analysis	5
CIS 100 CIS Student Orientation for Success	2
TOTAL	16
SECOND QUARTER	
CIS 225 Operating Systems Troubleshooting	3
COM 206 Interpersonal Communication	3
ENG 112 English Composition II or 132 Business Communications II	3
MAT 122 Statistics I	4
CIS 111 Introduction to Problem Solving & Computer Programming	4
TOTAL	17
THIRD QUARTER	
ACC 121 Principles of Financial Accounting	3
CIS 265 Database Management Systems or 266 Client/Server Database	3-4
CIS 241 Cisco Networking Fundamentals***	7
COM 225 Small Group Communication	3
_____ Humanities Elective*	3
TOTAL	19-20
FOURTH QUARTER	
CIS 242 Cisco Router Fundamentals	7
CIS 210 Computer Systems Analysis	3
LAW 101 Business Law I	4
MAN 205 Principles of Management	3
TOTAL	17
FIFTH QUARTER	
CIS 270 CIS Internship or _____ Business Elective _____ Internet Elective**	3
ECO 216 Principles of Macroeconomics	4
CIS 243 Cisco Routing in LANs	7
TOTAL	17
SIXTH QUARTER	
CIS 270 CIS Internship or _____ Business Elective	3
CIS 278 CIS Capstone	4
MRK 201 Marketing I	3
CIS 244 Cisco Routing in WANs	7
TOTAL	17

* See page 80.

** Internet elective see page 126.

*** Or other concentration elective

Career Program

Description

The rapid spread of computers and computer-based technologies over the past two decades has generated a need for skilled, highly trained workers in programming positions. Students in the Computer Information Systems program are provided technical skills for entry level information systems positions. Students are prepared in the areas of flowcharting and documenting structured programs, network administration, microcomputer and network operating systems, and business applications using computer languages such as Visual Basic.NET, Java, and C++. Students learn to use commercially available network and application software on local area networks and microcomputers.

Program Prerequisites:

BIS 105 Computer Concepts
and

MAT 101 Elementary Algebra
and

EBE 170 if planning to complete CIS 270 Internship.

Type of Degree or Certificate

Associate of Applied Science

103-104 Total Credit Hours

Career Opportunities

Employment opportunities in this expanding field include entry level positions such as programmers, web developers, help desk analysts, network administrators, user support specialists, and network engineers.

Concentration Electives***

Network Engineer

Required Course:

CIS 241 Cisco Networking Fundamentals 7

Choose 21 credit hours:

CIS 200 Fundamentals of Programming a Firewall 4

CIS 201 Wireless Network Administrator 4

CIS 242 Cisco Router Fundamentals 7

CIS 243 Cisco Routing in LANs 7

CIS 244 Cisco Routing in WANs 7

CIS 245 Remote Access for CCNP 4

CIS 246 Router Internetworking for CCNP 4

CIS 247 Multilayer Switching for CCNP 4

CIS 248 Support & Troubleshooting for CCNP 4

Career Program

Description

The rapid spread of computers and computer-based technologies over the past two decades has generated a need for skilled, highly trained workers in programming positions. Students in the Computer Information Systems program are provided technical skills for entry level information systems positions. Students are prepared in the areas of flowcharting and documenting structured programs, network administration, microcomputer and network operating systems, and business applications using computer languages such as Visual Basic.NET, Java, and C++. Students learn to use commercially available network and application software on local area networks and microcomputers.

Program Prerequisites:

BIS 105 Computer Concepts and
MAT 101 Elementary Algebra and
EBE 170 if planning to complete CIS 270 Internship.

Type of Degree or Certificate

Associate of Applied Science

104-105 Total Credit Hours

Career Opportunities

Employment opportunities in this expanding field include entry level positions such as programmers, web developers, help desk analysts, network administrators, user support specialists, and network engineers.

Concentration Electives***

Network Manager

Choose two:

CIS 253	Securing a Windows Network Environment	4
CIS 257	Microsoft Internet Security & Acceleration (ISA) Server	4
CIS 259	Designing Security of Windows Network	4
CIS 260	MCSE Exchange Server	4
CIS 271	Administering a Microsoft Windows Client	4
CIS 272	Microsoft Windows Server Operating System	4
CIS 273	Managing a Windows Network Infrastructure	4
CIS 274	Windows Directory Services Administration	4
CIS 275	MCSE 2000 Designing Directory Services	4
CIS 277	Planning a Windows Network Infrastructure	4
CIS 279	Microsoft SQL Server Administration	4

Computer Information Systems Network Manager Concentration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
CIS	100 CIS Student Orientation for Success	2
BIS	160 Introduction to Word, PowerPoint, & Excel	3
	or	
	161 Intermediate Word, PowerPoint, & Excel	
ENG	111 English Composition I	3
	or	
	131 Business Communications I	
MAT	116 College Algebra	5
	or	
	121 Mathematics for Business Analysis	
CIS	107 Introduction to Operating Systems	3
	TOTAL	16
SECOND QUARTER		
CIS	111 Introduction to Problem Solving & Computer Programming	4
CIS	225 Operating Systems Troubleshooting	3
COM	206 Interpersonal Communication	3
ENG	112 English Composition II	3
	or	
	132 Business Communications II	
MAT	122 Statistics I	4
	TOTAL	17
THIRD QUARTER		
CIS	265 Database Management Systems	3-4
	or	
	266 Client/Server Database	
CIS	230 Computer Networks	3
CIS	271 Administering a Microsoft Windows Client Operating System***	4
CIS	272 Microsoft Windows Server Operating System***	4
COM	225 Small Group Communication	3
	TOTAL	17-18
FOURTH QUARTER		
CIS	210 Computer Systems Analysis	3
CIS	273 Managing a Windows Network Infrastructure***	4
CIS	274 Windows Directory Services Administration***	4
LAW	101 Business Law I	4
MAN	205 Principles of Management	3
	TOTAL	18
FIFTH QUARTER		
	— CIS Concentration**	4
	— Business Elective	3
	or	
CIS	270 CIS Internship	3
	Internet Elective**	3
ACC	121 Principles of Financial Accounting	5
ECO	216 Principles of Macroeconomics	4
	TOTAL	19
SIXTH QUARTER		
CIS	270 CIS Internship	3
	or	
	Business Elective	4
CIS	278 CIS Capstone	3
MRK	201 Marketing I	3
	Humanities Elective*	3
	— CIS Concentration***	4
	TOTAL	17

* See page 80.

** Internet elective see page 126.

***Or other concentration elective

Computer Information Systems

Software Development Concentration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
MAT 116 College Algebra or 121 Mathematics for Business Analysis	5
BIS 160 Introduction to Word, PowerPoint, & Excel or 161 Intermediate Word, PowerPoint, & Excel	3
ENG 111 English Composition I or 131 Business Communications I	3
CIS 107 Introduction to Operating Systems	3
CIS 100 CIS Student Orientation for Success	2
COM 225 Small Group Communication	3
TOTAL	19
SECOND QUARTER	
CIS 225 Operating Systems Troubleshooting	3
CIS 111 Introduction to Problem Solving & Computer Programming	4
COM 206 Interpersonal Communication	3
MAT 122 Statistics I	4
ENG 112 English Composition II or 132 Business Communications II	3
TOTAL	17
THIRD QUARTER	
ACC 121 Principles of Financial Accounting	5
CIS 230 Computer Networks	3
— CIS Concentration	4
— Humanities Elective*	3
CIS 265 Database Management Systems or 266 Client/Server Database	3-4
TOTAL	18-19
FOURTH QUARTER	
CIS 210 Computer Systems Analysis	3
— CIS Concentration***	3
— CIS Concentration***	4
LAW 101 Business Law I	4
MAN 205 Principles of Management	3
TOTAL	17
FIFTH QUARTER	
— Internet Elective**	3
CIS 270 CIS Internship or — Business Information Elective	3
— CIS Concentration***	4
— CIS Concentration***	3
ECO 216 Principles of Macroeconomics	4
TOTAL	17
SIXTH QUARTER	
CIS 278 CIS Capstone	4
— CIS Concentration***	3
— CIS Concentration***	3
MRK 201 Marketing I	3
CIS 270 CIS Internship or — Business Elective	3
TOTAL	16

* See page 80.

** Internet elective see page 126.

***Concentration elective

Career Program

Description

The rapid spread of computers and computer-based technologies over the past two decades has generated a need for skilled, highly trained workers in programming positions. Students in the Computer Information Systems program are provided technical skills for entry level information systems positions. Students are prepared in the areas of flowcharting and documenting structured programs, network administration, microcomputer and network operating systems, and business applications using computer languages such as Visual Basic.NET, Java, and C++. Students learn to use commercially available network and application software on local area networks and microcomputers.

Program Prerequisites:

BIS 105 Computer Concepts
and
MAT 101 Elementary Algebra
and

EBE 170 if planning to complete CIS 270 Internship.

Type of Degree or Certificate

Associate of Applied Science

104-105 Total Credit Hours

Career Opportunities

Employment opportunities in this expanding field include entry level positions such as programmers, web developers, help desk analysts, network administrators, user support specialists, and network engineers.

Concentration Electives***

Software Development

BIS M81 Microsoft Project 1
CIS 112 Object Oriented Concepts 3
or
CIS 113 Object Oriented Design 4

The student must select two of the following threads, one of which must be a three-course sequence in one language. In addition, the student must select a sufficient number of courses from the Programming Electives list to total 24 credit hours for this concentration area.

(Object-Oriented) Visual Basic.NET Thread

CIS 147 Visual Basic.NET Programming I 3
CIS 148 Advanced Visual Basic.NET 3

(Object-Oriented) Java Thread

CIS 280 Java I 4
CIS 281 Java II 4

(Object-Oriented) C++ Thread

CIS 233 C++ Programming I 4
CIS 234 C++ Programming II 4
CIS 236 C++ Programming III 4

Cobol Thread

CIS 221 Cobol I 3
CIS 222 Cobol II 3

Web Programming Thread

CIS 223 Extensible Markup Language (XML) 3
or
144 Perl/CGI 3
or
251 php Web Programming
CIS 284 Client/Server Web Tools 3
or
285 Web Application Development with Java 4

Career Program

Description

The rapid spread of computers and computer-based technologies over the past two decades has generated a need for skilled, highly trained workers in programming positions. Students in the Computer Information Systems program are provided technical skills for entry level information systems positions. Students are prepared in the areas of flowcharting and documenting structured programs, network administration, microcomputer and network operating systems, and business applications using computer languages such as Visual Basic.NET, Java, and C++. Students learn to use commercially available network and application software on local area networks and microcomputers.

Program Prerequisites:

BIS 105 Computer Concepts
and

MAT 101 Elementary Algebra
and

EBE 170 if planning to complete CIS 270 Internship.

Type of Degree or Certificate

Associate of Applied Science

102-103 Total Credit Hours

Career Opportunities

Employment opportunities in this expanding field include entry level positions such as programmers, web developers, help desk analysts, network administrators, user support specialists, and network engineers.

Concentration Electives***

User Support

Required Courses:

BIS 201	Customer Service	3
CIS 164	Introduction to User Support	3
CIS 166	User Support Tools & Techniques	3
CIS 238	P.C. Installation Management	3
COM287	Effective Listening	3
CIS 162	Microsoft Office Troubleshooting & Problem Solving	3
CIS 264	A+ Certification	3
PSY 126	Stress Management	3

Computer Information Systems

User Support Concentration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
BIS 160	Introduction to Word, PowerPoint, & Excel	3
	or	
	161 Intermediate Word, PowerPoint, & Excel	
CIS 107	Introduction to Operating Systems	3
ENG 111	English Composition I	3
	or	
	131 Business Communications I	
MAT 116	College Algebra	5
	or	
	121 Mathematics for Business Analysis	
CIS 100	CIS Student Orientation for Success	2
	TOTAL	16
SECOND QUARTER		
CIS 225	Operating Systems Troubleshooting	3
COM 206	Interpersonal Communication	3
MAT 122	Statistics I	4
ENG 112	English Composition II	3
	or	
	132 Business Communications II	
CIS 111	Introduction to Problem Solving & Computer Programming	4
	TOTAL	17
THIRD QUARTER		
ACC 121	Principles of Financial Accounting	5
CIS 265	Database Management Systems	3-4
	or	
	266 Client/Server Database	
BIS 201	Customer Service***	3
CIS 230	Computer Networks	3
COM 225	Small Group Communication	3
	Humanities Elective*	3
	TOTAL	21
FOURTH QUARTER		
LAW 101	Business Law I	4
CIS 210	Computer Systems Analysis	3
CIS 164	Introduction to User Support***	3
CIS 238	P.C. Installation Management***	3
MAN 205	Principles of Management	3
	TOTAL	16
FIFTH QUARTER		
CIS 270	CIS Internship	2
	or	
	Business Elective	
CIS 264	A+ Certification***	3
ECO 216	Principles of Macroeconomics	4
	Internet Elective**	3
PSY 126	Stress Management	3
CIS 166	User Support Tools & Techniques***	3
	TOTAL	19
SIXTH QUARTER		
COM 287	Effective Listening	3
CIS 162	Microsoft Office Troubleshooting & Problem Solving***	3
CIS 278	CIS Capstone	4
MRK 201	Marketing I	3
CIS 270	CIS Internship	3
	or	
	Business Elective	
	TOTAL	16

* See page 80.

** Internet elective see page 126.

***Concentration elective

Computer Information Systems

Web Development Concentration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
MAT	116	College Algebra or 121 Mathematics for Business Analysis	5
ENG	111	English Composition I or 131 Business Communications I	3
CIS	107	Introduction to Operating Systems	3
BIS	160	Introduction to Word, PowerPoint, & Excel or 161 Intermediate Word, PowerPoint, & Excel	3
CIS	100	CIS Student Orientation for Success	2
TOTAL			16
SECOND QUARTER			
CIS	111	Introduction to Problem Solving & Computer Programming	4
CIS	225	Operating Systems Troubleshooting	3
COM	206	Interpersonal Communication	3
MAT	122	Statistics I	4
ENG	112	English Composition II or 132 Business Communications II	3
TOTAL			17
THIRD QUARTER			
CIS	265	Database Management Systems or 266 Client/Server Database	3-4
CIS	230	Computer Networks Humanities Elective*	3
CIS	130	Introduction to Web Development***	3
CIS	136	Introduction to XHTML***	3
COM	225	Small Group Communication	3
TOTAL			18-19
FOURTH QUARTER			
MAN	205	Principles of Management	3
CIS	137	Introduction to JavaScript***	3
CIS	210	Computer Systems Analysis	3
LAW	101	Business Law I	4
ACC	111	Principles of Accounting I CIS Concentration***	3
TOTAL			19
FIFTH QUARTER			
—	—	Internet Elective** CIS Concentration***	3
CIS	270	CIS Internship or Business Elective	3
ECO	216	Principles of Macroeconomics	4
CIS	131	Intermediate Web Development***	3
TOTAL			16
SIXTH QUARTER			
CIS	270	CIS Internship or Business Elective CIS Concentration	3
CIS	278	CIS Capstone	6
MRK	201	Marketing I	4
TOTAL			13
TOTAL			16

* See page 80.

** Internet elective see page 126.

***Or other concentration elective

Career Program

Description

The rapid spread of computers and computer-based technologies over the past two decades has generated a need for skilled, highly trained workers in programming positions. Students in the Computer Information Systems program are provided technical skills for entry level information systems positions. Students are prepared in the areas of flowcharting and documenting structured programs, network administration, microcomputer and network operating systems, and business applications using computer languages such as Visual Basic.NET, Java, and C++. Students learn to use commercially available network and application software on local area networks and microcomputers.

Program Prerequisites:

BIS 105 Computer Concepts
and

MAT 101 Elementary Algebra
and

EBE 170 if planning to complete CIS 270 Internship.

Type of Degree or Certificate

Associate of Applied Science

102-103 Total Credit Hours

Career Opportunities

Employment opportunities in this expanding field include entry level positions such as programmers, web developers, help desk analysts, network administrators, user support specialists, and network engineers.

Concentration Electives***

Web Development

Required Courses:

CIS 130	Introduction to Web Development	3
CIS 131	Intermediate Web Development	3
CIS 136	Introduction to XHTML	3
CIS 137	Introduction to JavaScript	3

Choose 12 credit hours:

CIS 134	Macromedia Flash	3
CIS 138	Advanced Macromedia Flash	3
CIS 141	Active Server Pages	3
CIS 143	Cold Fusion	3
CIS 144	PERL/CGI	3
CIS 223	Extensible Markup Language (XML)	3
CIS 224	Web Server Administration and Security	4
CIS 251	PHP Web Programming	3
CIS 284	Web Client/Server Tools	3

CIS Concentrative Electives

Internet Electives**

Choose 3 credit hours:

CIS	130	Introduction to Web Development	3
CIS	134	Macromedia Flash	3
CIS	136	Introduction to XHTML	3
CIS	137	Introduction to JavaScript	3
CIS	M72	Cyber Security Tools	1
CIS	M73	Cyber Ethics	1
CIS	257	Microsoft Internet Security & Acceleration (ISA) Server	4
CIS	259	Designing Security of Windows Network	4

Non-Concentration Electives

(May be selected from list or from any area of concentration.)

CIS	101	Home Computer Networks & Security	3
CIS	206	Network Security I	3
CIS	207	Network Security II	3
CIS	255	Securing a UNIX/LINUX Operating System	4

Financial Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
BIS	M85	Microsoft Word	2
BIS	M45	Microsoft Excel	2
BIS	201	Customer Service	3
FIN	105	Introduction to Financial Institutions	3
FIN	245	Personal Finance	3
		TOTAL	16
SECOND QUARTER			
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
MAT	116	College Algebra	5
		or	
	121	Mathematics for Business Analysis	
BIS	M35	Microsoft Access	2
MAN	205	Principles of Management	3
FIN	246	Principles of Investment	3
		TOTAL	16
THIRD QUARTER			
LAW	101	Business Law I	4
FIN	200	Consumer Credit	3
PSY	121	General Psychology I	3
MAT	122	Statistics I	4
	—	Business Elective	3
		TOTAL	17
FOURTH QUARTER			
ACC	121	Principles of Financial Accounting	5
FIN	205	Commercial Credit	3
LAW	102	Business Law II	4
MRK	201	Marketing I	3
SOC	145	Comparing Cultures	3
		TOTAL	18
FIFTH QUARTER			
ACC	122	Principles of Managerial Accounting	5
COM	211	Effective Speaking I	3
		or	
	225	Small Group Communication	
LAW	103	Consumer Law	3
FIN	—	Financial Management Elective	3
ECO	216	Principles of Macroeconomics	4
		TOTAL	18
SIXTH QUARTER			
FIN	255	Money & Capital Markets	3
	—	Humanities Elective*	3
FIN	295	Financial Management Seminar	3
FIN	215	Corporation Finance	3
ECO	218	Principles of Microeconomics	4
		TOTAL	16

*See page 80.

Career Program

Description

This program is designed to prepare students for careers in all aspects of financial institutions. It is designed to meet the human resource needs of commercial banks, savings and loans, credit unions and other financial institutions. Students in the Financial Management program develop skills in coordinating multiple activities and decision making. Students' critical thinking skills are enhanced through knowledge gained from financial and monetary policy activities. Emphasis is on operations, credit analysis, financial statement review and global economic perspectives as they relate to present-day financial institutions. Students are introduced to many aspects of lending practices, regulatory issues and the impact of technology on financial institutions.

Type of Degree or Certificate

Associate of Applied Science

101 Total Credit Hours

Career Opportunities

The great variety of financial services, offered by these institutions provides a wide choice of entry level career opportunities in lending, operations accounting, trust services, branch services, and many other areas for a variety of institutions: banks, credit unions, financial service providers, savings associations, and mortgage banks.

Employment opportunities for tellers, credit analysts, branch managers and other supervisory positions.

Career Program

Description

There is a need for entry level management personnel in restaurants, hotels, resorts, convention centers, private clubs and catering businesses. Efficient and profitable operation of these businesses requires managers to recruit, train and supervise an adequate number of employees. This program prepares students in supervisory skills, accounting, human relation skills, and understanding the skills needed in the management for a lodging or restaurant operation. Employment opportunities for lodging, restaurant, resort, private club entry level managers, liquor establishment managers, and caterer's assistants are available to students in the hospitality management industry. This program is accredited by the American Culinary Federation Accrediting Commission and the Commission on Accreditation of Hospitality Management Programs.

Type of Degree or Certificate

Associate of Applied Science

96-97 Total Credit Hours

Career Opportunities

The hospitality/tourism industry is the number one employer among service industries, and is fast becoming the largest single employment category of ALL industries world wide. In the United States, hospitality accounts for a larger and ever growing portion of the country's Gross National Product.

Right now, over half a million jobs in the hospitality industry go unfilled each year, and that number is likely to continue to grow as the food service industry grows. Top ranked hospitality professionals have almost unlimited possibilities for career satisfaction.

Hospitality Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
HMT	101 Dining/Kitchen Orientation	2
HMT	105 Survey of the Food Industry	3
HMT	110 Menu Planning	2
HMT	107 Sanitation & Safety	3
MAT	105 Business Mathematics	4
	121 General Psychology I	3
TOTAL		17
SECOND QUARTER		
BIS	160 Introduction to Word, PowerPoint, & Excel	3
ENG	111 English Composition I	3
	or	
	131 Business Communications I	
HMT	112 Basic Food Preparation	5
	General Education Elective*	3
COM	206 Interpersonal Communication	3
TOTAL		17
THIRD QUARTER		
ENG	112 English Composition II	3
	or	
	132 Business Communications II	
MAN	205 Principles of Management	3
HMT	114 Advanced Food Preparation	5
ACC	121 Principles of Financial Accounting	3
TOTAL		16
FOURTH QUARTER		
HMT	125 Bar Operations Management	3
HMT	201 Food Service Equipment Design & Maintenance	3
HMT	291 Food Service Internship I	3
LAW	101 Business Law I	4
MRK	201 Marketing I	3
TOTAL		16
FIFTH QUARTER		
HMT	215 Food & Labor Cost Controls	3
HMT	225 Organization & Administration of Hospitality Industry	3
HMT	292 Food Service Internship II	3
HMT	227 Marketing in the Hospitality Industry	3
ECO	105 General Economics	3-4
	or	
	216 Principles of Macroeconomics	
TOTAL		15-16
SIXTH QUARTER		
HMT	226 Purchasing for the Hospitality Industry	3
HMT	293 Food Service Internship III	3
HMT	295 Food Service Management Seminar	3
	Business Elective	3
	Humanities Elective*	3
TOTAL		15

*See page 80.

Hospitality Management

Culinary Arts Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
HMT	101	Dining/Kitchen Orientation	2
HMT	105	Survey of the Food Industry	3
HMT	107	Sanitation & Safety	3
HMT	110	Menu Planning	2
BIS	160	Introduction to Word, PowerPoint, & Excel	3
MAT	105	Business Mathematics	4
			TOTAL
			17
SECOND QUARTER			
HMT	112	Basic Food Preparation	5
DIT	108	Introduction to Food & Nutrition	3
HMT	125	Bar Operations Management	3
ENG	111	English Composition I	3
	131	or Business Communications I	
COM	206	Interpersonal Communication	3
			TOTAL
			17
THIRD QUARTER			
HMT	114	Advanced Food Preparation	5
HMT	201	Food Service Equipment Design & Maintenance	3
HMT	226	Purchasing for the Hospitality Industry	3
ENG	112	English Composition II	3
	132	or Business Communications II	
			TOTAL
			14
FOURTH QUARTER			
HMT	207	Butchery & Fish Management	4
PSY	105	Survey of Psychology	3
	121	or General Psychology I	
HMT	291	Food Service Internship I	3
	—	Humanities Elective*	3
			TOTAL
			13
FIFTH QUARTER			
HMT	206	Garde Manger	5
HMT	292	Food Service Internship II	3
ACC	121	Principles of Financial Accounting	5
MAN	205	Principles of Management	3
			TOTAL
			16
SIXTH QUARTER			
HMT	208	Pastry & Confectionery	5
HMT	293	Food Service Internship III	3
HMT	225	Organization & Administration of Hospitality Industry	3
	—	Business Elective	3
			TOTAL
			14
SEVENTH QUARTER			
HMT	209	Professional Cooking	5
HMT	215	Food & Labor Cost Controls	3
ECO	105	General Economics	3-4
	216	or Principles of Macroeconomics	
MRK	201	Marketing I	3
			TOTAL
			14-15

*See page 80.

Career Program

Description

The serving of good food is important to the reputation of any restaurant. Chefs, cooks, and other restaurant workers are responsible for the reputation of a restaurant. Chefs and cooks are responsible for preparing meals that are pleasing to the taste and the eye. Many chefs have earned a reputation for both themselves, and the establishments where they work due to their skillful preparation of traditional dishes and the creation of new ones. Through this specialized program, students develop extensive skills and knowledge of food preparation and presentation. Students also gain a total understanding of the duties and responsibilities of a chef and other culinary personnel. The program is accredited by the American Culinary Federation Accrediting Commission.

Type of Degree or Certificate

Associate of Applied Science

105-106 Total Credit Hours

Career Opportunities

Employment opportunities for chefs, cooks, bakers, pastry chefs, production personnel, and caterers are available in this rapidly growing field at fine restaurants, clubs, hotels and health care facilities.

Career Program

Description

Marketing Management graduates play a vital role in any organization that needs products and services effectively and profitably distributed. Organizational functions of these graduates range from direct sales and customer services to management and coordination of personnel, sales territories, and promotional activities. Graduates may be involved in aspects of product development, advertising, promotion, marketing strategies, pricing, and research. Skills gained include excellent interpersonal and written communication, organizational ability, attention to detail, computational expertise, particularly in the areas of accounting and statistics, and understanding of human behavioral patterns.

Type of Degree or Certificate

Associate of Applied Science

96 Total Credit Hours

Career Opportunities

Employment opportunities include sales representatives, marketing research technicians, industrial marketing managers, and representatives in advertising agencies, media organizations, retailers, and service or industrial corporations. Marketing Management graduates are prepared to work in the private, public or governmental sectors.

Marketing Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
		or	
	131	Business Communications I	3
MAN	105	Introduction to Business	
MAT	116	College Algebra	5
		or	
	121	Mathematics for Business Analysis	
ACC	121	Principles of Financial Accounting	5
			TOTAL
			16
SECOND QUARTER			
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
MRK	201	Marketing I	3
MAT	122	Statistics I	4
MAN	205	Principles of Management	3
ACC	122	Principles of Managerial Accounting	5
			TOTAL
			18
THIRD QUARTER			
MRK	202	Marketing II	3
MRK	225	Sales Fundamentals	3
		PSY/SOC Elective	3
COM	211	Effective Speaking I	3
BIS	105	Computer Concepts	3
			TOTAL
			15
FOURTH QUARTER			
MRK	215	Advertising	3
MRK	245	Principles of Retailing	3
		Marketing Elective	3
ECO	216	Principles of Macroeconomics	4
ENT	105	Introduction to Entrepreneurship	3
			TOTAL
			16
FIFTH QUARTER			
MRK	235	Marketing Research	3
		PSY/SOC Elective	3
ECO	218	Principles of Microeconomics	3
		Marketing Elective	3
		Marketing Elective	3
			TOTAL
			16
SIXTH QUARTER			
MRK	270	Marketing Internship	6
		or	
		Business Elective	
		Marketing Elective	3
MRK	295	Marketing Seminar	3
		Humanities Elective*	3
			TOTAL
			15

*See page 80.

Paralegal

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ACC	111	Principles of Accounting I	3
ENG	111	English Composition I	3
PAR	105	Paralegal Principles	4
PAR	106	Paralegal Principles: Technology	2
COM	206	Interpersonal Communication	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
TOTAL			18
SECOND QUARTER			
PLS	101	American Federal Government I	3
PAR	121	Litigation I	3
PAR	111	Legal Research & Writing	4
ENG	112	English Composition II	3
ACC	112	Principles of Accounting II	3
TOTAL			16
THIRD QUARTER			
PAR	112	Legal Research & Writing II	4
PAR	115	Contract Law & the Uniform Commercial Code	3
PLS	102	American Federal Government II	3
ENG	199	Text Editing	3
PAR	122	Litigation II	3
TOTAL			16
FOURTH QUARTER			
PAR	201	Business Organization I	3
MAT	105	Business Mathematics	4-5
	116	College Algebra	
		Humanities Elective*	3
PAR	220	Legal Ethics	3
PAR	211	Probate Law I	3
TOTAL			16-17
FIFTH QUARTER			
PAR	215	Family Law	3
PAR	291	Paralegal Internship I	2
PAR		Paralegal Elective	6
ECO	216	Principles of Macroeconomics	4
PAR	131	Real Estate Transactions I	3
TOTAL			18
SIXTH QUARTER			
PAR		Paralegal Elective	6
PAR	292	Paralegal Internship II	2
PSY	121	General Psychology I	3
		or	
SOC	111	General Sociology I	
PAR		Paralegal Career Elective	3
PAR	205	Criminal Law & Procedure	3
TOTAL			17

*See page 80.

Career Program

Description

Sinclair's Paralegal program has produced hundreds of graduates now working in the legal field in the Miami Valley. It was the first program established in the Dayton area, and the first paralegal program in this area to be approved by the American Bar Association.

The program curriculum is designed to combine legal concepts, practical application techniques, and modern technology skills to prepare paralegals for productive employment in the legal field. The goals of the program are to provide an opportunity for students to acquire skills that will enable them to deliver legal services under the supervision of an attorney; to maintain a cutting-edge curriculum that enhances opportunities for employment of PAR graduates by a wide range of employers; and to provide an educational program that emphasizes skills in critical thinking, writing, teamwork, and assessment. The paralegal program includes general education requirements, theory and practice courses, educational requirements in ethical legal practices, and extensive training in the latest technology in use in the legal field. All PAR students are required to complete two quarters of internships, giving them hands-on experience using paralegal skills.

Students must be accepted into the paralegal program before beginning PAR courses. Paralegal Principles (PAR 105) and Paralegal Principles Technology (PAR 106) are required of every student before enrolling in other paralegal courses. Requirements for acceptance are outlined in a program packet. Students must earn a grade of "C" or better in all PAR courses to pass.

Program Prerequisites:

BIS 105 Computer Concepts
and
AR 105 Paralegal Principles
and
PAR 106 Paralegal Principles:
Technology

Type of Degree or Certificate

Associate of Applied Science

101-102 Total Credit Hours

Career Opportunities

Paralegals are employed in law firms, government agencies, public and private agencies, corporations, financial institutions, insurance companies, and real estate offices. The job description will vary according to the type of office in which the paralegal is employed, and the legal specialty of that office. The Paralegal program is approved by the American Bar Association.

Career Program

Description

Students acquire a variety of skills in selling, renting and buying property. Courses are offered which are required by the Ohio Division of Real Estate for persons taking the real estate sales and brokers examinations. Other courses offered include commercial appraisal, property management, and real estate investing. Students learn to study property listings, interview prospective clients, show properties, discuss conditions of the sale or terms of the lease and negotiating loans on property.

Type of Degree or Certificate

Associate of Applied Science

98 Total Credit Hours

Career Opportunities

Opportunities are available for building consultants, residential leasing agents, sales representatives, salespersons, brokers, appraisers, and apartment managers with real estate firms, developers, and property management companies.

Real Estate/Property Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
RES	121	Real Estate Abstracting I	3
RES	201	Real Estate Principles & Practices	4
BIS	160	Introduction to Word, PowerPoint, & Excel	3
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
ENT	105	Introduction to Entrepreneurship	3
		TOTAL	<u>16</u>
SECOND QUARTER			
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
MAN	205	Principles of Management	3
RES	122	Real Estate Abstracting II	3
RES	202	Real Estate Law	4
PLS	104	Urban Government	3
		TOTAL	<u>16</u>
THIRD QUARTER			
LAW	101	Business Law I	4
MAN	225	Human Relations & Organizational Behavior	3
		or	
	237	Human Resource Management	
MAT	105	Business Mathematics	4
RES	203	Real Estate Finance	2
RES	204	Real Estate Appraisal for Realtors	2
		TOTAL	<u>15</u>
FOURTH QUARTER			
ACC	121	Principles of Financial Accounting	3
BIS	M35	Microsoft Access	2
MRK	201	Marketing I	3
BIS	201	Customer Service	3
RES	215	Real Estate Investing	3
		TOTAL	<u>16</u>
FIFTH QUARTER			
ACC	122	Principles of Managerial Accounting	3
ECO	216	Principles of Macroeconomics	4
SOC	145	Comparing Cultures	3
PSY	121	General Psychology I	3
RES	221	Property Management	3
		TOTAL	<u>18</u>
SIXTH QUARTER			
ECO	218	Principles of Microeconomics	4
RES	278	Real Estate Capstone	1
RES	210	Real Estate Practice Seminar	3
		Humanities Elective*	3
FIN	215	Corporation Finance	3
COM	211	Effective Speaking I	3
		TOTAL	<u>17</u>

*See page 80.

Travel & Tourism

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
TNT	100	Introduction to Travel & Tourism	3
TNT	112	Domestic Air Travel	3
TNT	130	Destinations I	3
MAT	105	Business Mathematics	4
BIS	160	Introduction to Word, PowerPoint, & Excel	3
TOTAL			16
SECOND QUARTER			
TNT	104	Tariff & Ticketing: North America	3
TNT	108	Accommodations, Cars, Tours & Rail	2
TNT	122	Airline Computer I	3
ACC	111	Principles of Accounting I	3
ENG	131	Business Communications I	3
TNT	131	Destinations II	3
TOTAL			17
THIRD QUARTER			
TNT	102	Travel Sales & Telephone Techniques	1
TNT	114	International Travel	3
TNT	123	Airline Computer II	2
ENG	132	Business Communications II	3
MRK	201	Marketing I	3
TNT	109	Cruise Line Sales	2
COM	287	Effective Listening	3
TOTAL			17
FOURTH QUARTER			
TNT	224	Advanced Airline Computer I	2
TNT	250	Travel Sales Practicum	3
COM	206	Interpersonal Communication	3
MAN	105	Introduction to Business	3
	205	Principles of Management	
		Foreign Language Elective	3
PSY	105	Survey of Psychology	3
		or	
	121	General Psychology I	
TOTAL			17
FIFTH QUARTER			
TNT	106	Employment Guidelines for Travel Industry	1
TNT	201	Tourism for the Travel Industry	3
TNT	215	Managing a Travel Agency	3
TNT	225	Advanced Airline Computer II	2
TNT		Career Elective**	3
TNT	270	Travel & Tourism Internship	3
		Foreign Language Elective	3
TOTAL			18
SIXTH QUARTER			
TNT	210	Management of Travel Sales Personnel	3
TNT	202	Marketing for the Travel Industry	3
TNT	278	Travel & Tourism Capstone	3
HUM	115	International Environment: Culture & Business	3
		General Education Elective	3
TOTAL			15

*See page 80.

**Career Elective: TNT 297, HMT 105, HMT 210, BUO 105, BUO 120, COM 211 or HIS 218

Career Program

Description

Travel & Tourism students gain a knowledge of the basic theory of travel and skills of travel professionals. Students complete practical exercises that simulate real work experience. Sinclair's airline computer classroom, features live airline reservation terminals. The internship program provides an opportunity to gain on-the-job experience before graduation.

Type of Degree or Certificate

Associate of Applied Science

100 Total Credit Hours

Career Opportunities

Some employment opportunities within the growing travel industry include travel agents, airline agents, flight attendants, car rental agents, hotel front desk or reservations, tour guides, cruise ships, e.travel and convention and visitor bureau managers.

Certificate

Description

In this one-year certificate program, students receive specialized training necessary to work with personal computers and end-user software applications, such as Microsoft Word, Excel, PowerPoint, Publisher, and Access.

Type of Degree or Certificate

Certificate

52 Total Credit Hours

Career Opportunities

Students master the basics of customer service, work place technology and electronic files management to provide administrative support in a variety of entry level office positions.

Business Information Systems Information Processing Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
MAT	105	Business Mathematics	4
BIS	101	Personal Computer Keyboarding	2
BIS	105	Computer Concepts	3
BIS	M85	Microsoft Word	2
		TOTAL	14
SECOND QUARTER			
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
BIS	102	Document Formatting	2
COM	206	Interpersonal Communication	3
BIS	114	Records Management & Electronic Files	3
BIS	M86	Advanced/Expert Word	2
		TOTAL	13
THIRD QUARTER			
ENG	199	Text Editing	3
BIS	M45	Microsoft Excel	2
BIS	M55	Microsoft PowerPoint	2
BIS	M75	The Internet	2
BIS	201	Customer Service	3
		TOTAL	12
FOURTH QUARTER			
BIS	202	Advanced Customer Service Concepts	3
BIS	115	Work Place Technologies	2
BIS	103	Advanced Document Formatting/Skillbuilding	4
BIS	M25	Desktop Publishing	2
BIS	M35	Microsoft Access	2
		TOTAL	13

BUS

Business Information Systems

Medical Office Specialist

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	131	Business Communications I	3
MAT	105	Business Mathematics	4
BIS	136	Introduction to Medical Terminology	4
BIS	M85	Microsoft Word	2
TOTAL			13
SECOND QUARTER			
BIS	102	Document Formatting	2
BIS	137	Intermediate Medical Terminology	4
BIS	M45	Microsoft Excel	2
ENG	199	Editing & Proofreading	4
BIS	M86	Advanced/Expert Word	2
TOTAL			14
THIRD QUARTER			
BIS	138	Advanced Medical Terminology	4
HIM	260	ICD-9-CM Medical Office Coding	3
MAN	205	Principles of Management	3
BIS	251	Medical Transcription I	4
TOTAL			14
FOURTH QUARTER			
HIM	261	CPT Medical Office Coding	3
BIS	201	Customer Service	3
BIS	116	Medical Office Procedures	4
BIS	252	Medical Transcription II	4
TOTAL			14

Certificate

Description

A one-year program where students receive specialized education that will prepare them to work in a medical office. Students master the basics of medical terminology, medical office procedures, transcription and billing.

Type of Degree or Certificate

Certificate

55 Total Credit Hours

Career Opportunities

Students master the basics of medical terminology, medical office procedures, medical transcription and medical billing to provide administrative support in a variety of medical office environments.

BUS

Certificate

Description

Students learn how to use personal computers for business administration, decision support, and financial applications. The personal computers certificate is intended for those with higher education and/or skills to update their knowledge with personal computer techniques.

Type of Degree or Certificate

Certificate

55 Total Credit Hours

Business Information Systems

Personal Computers In Business

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	105	Computer Concepts	3
BIS	M75	The Internet	2
MAN	105	Introduction to Business	3
BIS	M85	Microsoft Word	2
ACC	121	Principles of Financial Accounting	5
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
			TOTAL
			18
SECOND QUARTER			
ACC	125	Personal Computer Applications in Accounting	3
BIS	115	Work Place Technologies	2
CIS	107	Introduction to Operating Systems	3
BIS	M35	Microsoft Access	2
BIS	M45	Microsoft Excel	2
BIS	M55	Microsoft PowerPoint	2
BIS	207	Telecommunications	2
BIS	M86	Advanced/Expert Word	2
			TOTAL
			18
THIRD QUARTER			
BIS	M36	Advanced/Expert Access	3
BIS	M46	Advanced/Expert Excel	2
BIS	172	Integrated Solutions	2
CIS	130	Introduction to Web Development	3
CIS	162	Microsoft Office Troubleshooting & Problem Solving	3
	_____	Computer Information Systems Elective	3
	_____	Communication Arts Elective	3
			TOTAL
			19

Business Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
MAN	205	Principles of Management	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
MAT	122	Statistics I	4
COM	206	Interpersonal Communication	3
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
			TOTAL
			16
SECOND QUARTER			
MAN	225	Human Relations & Organizational Behavior	3
MAN	216	Managing Operations	3
MAN	255	Management Information Systems I	3
COM	211	Effective Speaking I	3
ECO	216	Principles of Macroeconomics	4
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
			TOTAL
			19
THIRD QUARTER			
MRK	201	Marketing I	3
MAN	110	Introduction to International Business	3
MAN	226	Human Relations Issues	3
MAN	295	Management Seminar	3
	—	Business Elective	3
			TOTAL
			15

Certificate

Description

With this program, students gain an understanding of business procedures to prepare them for a management position, or update the management skills of those currently employed in a managerial, administrative or office support role.

Type of Degree or Certificate

Certificate

50 Total Credit Hours

BUS

Certificate

Description

This program prepares existing or potential entrepreneurs in wide variety of small business functions. In addition to traditional management courses, the following key areas are emphasized for entrepreneurs: entrepreneurial management, small business marketing, small business finance, and business plan development.

Type of Degree or Certificate

Certificate

53 Total Credit Hours

Career Opportunities

Employment opportunities include account secretaries in accounting departments in private businesses and industries, educational institutions, and other governmental agencies.

Entrepreneurship

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	160	Introduction to Word, PowerPoint, & Excel	3
COM	211	Effective Speaking I	3
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
ENT	105	Introduction to Entrepreneurship	3
MAN	110	Introduction to International Business	3
SOC	111	General Sociology I	3
		TOTAL	18
SECOND QUARTER			
BIS	M35	Microsoft Access	2
ENG	112	English Composition II	3
		or	
	132	Business Communications II	
ENT	210	Small Business Management	3
ENT	220	Small Business Marketing	3
LAW	101	Business Law I	4
SOC	214	Applied Population Demography	3
		TOTAL	18
THIRD QUARTER			
ECO	218	Principles of Microeconomics	4
ENT	240	Small Business Finance	3
ENT	260	Business Plan Development	4
MAN	205	Principles of Management	3
MRK	236	Consumer Behavior	3
		TOTAL	17

Food Service Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ACC	111	Principles of Accounting I	3
HMT	105	Survey of the Food Industry	3
HMT	107	Sanitation & Safety	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
ENG	111	English Composition I	3
		or	
	131	Business Communications I	
	—	Business Elective	<u>3</u>
			TOTAL 18
SECOND QUARTER			
ACC	112	Principles of Accounting II	3
HMT	112	Basic Food Preparation	5
HMT	113	Lab for HMT 112	
HMT	110	Menu Planning	3
MAN	205	Principles of Management	3
HMT	—	Hospitality Management Elective	<u>3-5</u>
			TOTAL 17-19
THIRD QUARTER			
HMT	114	Advanced Food Preparation	5
HMT	115	Lab for HMT 114	
HMT	201	Food Service Equipment Design & Maintenance	3
HMT	215	Food & Labor Cost Controls	3
HMT	225	Organization & Administration of Hospitality Industry	3
HMT	226	Purchasing for the Hospitality Industry	<u>3</u>
			TOTAL 17

Certificate

Description

The Food Service Management certificate program combines classroom instruction and laboratory experience in food preparation and service for the restaurant and lodging industry. The curriculum includes the National Restaurant Association ProManagement courses that lead to the ProManagement certificate.

Type of Degree or Certificate

Certificate

52-54 Total Credit Hours

Career Opportunities

This certificate provides experience for food preparation and service for restaurants and lodging industry.

BUS

Short Term

Description

State-of-the-art networking skills; includes wired and wireless networks, networking equipment such as wireless routers and low to mid-level firewall hardware.

Type of Degree or Certificate

Short Term Certificate

24 Total Credit Hours

Career Opportunities

This certificate helps prepare students for careers as network installers, wireless network administrators, network security analysts, systems engineers, hardware and support specialists.

Advanced Networking Engineer

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	200	Fundamentals of Programming a Firewall	4
CIS	201	Wireless Network Administrator	<u>4</u>
TOTAL			8
SECOND QUARTER			
CIS	245	Remote Access for CCNP	4
CIS	246	Router Internetworking for CCNP	<u>4</u>
TOTAL			8
THIRD QUARTER			
CIS	247	Multilayer Switching for CCNP	4
CIS	248	Network Support & Troubleshooting for CCNP	<u>4</u>
TOTAL			8

Short Term

Description

Students completing this certificate will have the written and oral communication skills as well as the computer skills needed to effectively support computer operations for a small, medium, or large company. Technical course work emphasizes operating systems and troubleshooting skills.

Type of Degree or Certificate

Short Term Certificate

18-19 Total Credit Hours

Career Opportunities

The skills apply equally well to an entry level help desk support position.

Business Operations System Support

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
		or	
	121	Technical Composition I	
CIS	107	Introduction to Operating Systems	3
		or	
	108	Introduction to Windows OS for the Network Manager	<u> </u>
TOTAL			6
SECOND QUARTER			
CIS	230	Computer Networks	3
COM	206	Interpersonal Communication	<u>3</u>
TOTAL			6
THIRD QUARTER			
CIS	231	UNIX I	3-4
		or	
	271	Administering a Microsoft Windows Client Operating System	
CIS	225	Operating Systems Troubleshooting	3
		or	
	162	Microsoft Office Troubleshooting & Problem Solving	<u> </u>
TOTAL			6-7

Call Center

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	101	Personal Computer Keyboarding	2
BIS	104	Introduction to P.C. Usage	2
BIS	201	Customer Service	3
MRK	201	Marketing I	3
ENG	131	Business Communications I	3
TOTAL			13
SECOND QUARTER			
BIS	202	Advanced Customer Service Concepts	3
ENG	199	Text Editing	3
BIS	M70	Introduction to the Internet	1
BIS	160	Introduction to Word, PowerPoint, & Excel	3
MRK	236	Consumer Behavior	3
TOTAL			13

Fast Track Entrepreneur

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	160	Introduction to Word, PowerPoint, & Excel	3
BIS	M35	Microsoft Access	2
ENT	105	Introduction to Entrepreneurship	3
TOTAL			8
SECOND QUARTER			
ENT	210	Small Business Management	3
ENT	220	Small Business Marketing	3
MAN	110	Introduction to International Business	3
TOTAL			9
THIRD QUARTER			
ENT	240	Small Business Finance	3
ENT	260	Business Plan Development	4
MRK	236	Consumer Behavior	3
TOTAL			10

Short Term

Description

Call centers have become quite sophisticated with effective measures for productivity. Students will learn how a call center operates and how the productivity measures are used. Students who complete this certificate can continue with a two-year associate degree in the BIS department and all courses will transfer.

Type of Degree or Certificate

Short Term Certificate

26 Total Credit Hours

Career Opportunities

Employment opportunities include account secretaries in accounting departments in private businesses and industries, educational institutions, and other governmental agencies.

This certificate is designed for those seeking employment within a call center environment or those interested in improving their customer service skills and telephone techniques.

Short Term

Description

This three-quarter program allows individuals to gain critical knowledge in the areas of small business management: planning, evaluating, operating, financing, and marketing the business concept. Emphasis is on developing a complete business plan that addresses all functional areas of the business operation. Potential investors and creditors rely heavily on the well prepared business plan as well as the knowledge of the entrepreneur, and this Fast Track certificate is meant to meet that requirement.

Type of Degree or Certificate

Short Term Certificate

27 Total Credit Hours

Short Term

Description

This certificate is designed to provide individuals with state of the art programming skills. It is designed for experienced programmers or selected individuals wishing to make a career change into the Information Technology field. The certificate will focus on the latest programming languages, database theory, object oriented concepts and team building. Students have the option to concentrate on enterprise development or web development technologies.

BUS

Type of Degree or Certificate

Short Term Certificate

32 Total Credit Hours

Short Term

Description

This certificate is designed to provide individuals with state of the art programming skills. It is designed for experienced programmers or selected individuals wishing to make a career change into the Information Technology field. The certificate will focus on the latest programming languages, database theory, object oriented concepts and team building. Students have the option to concentrate on enterprise development or web development technologies.

Type of Degree or Certificate

Short Term Certificate

28 Total Credit Hours

Fast Track Programmer Analyst Enterprise Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
CIS 210	Computer Systems Analysis	3
CIS 233	C++ Programming I	4
CIS 112	Object Oriented Concepts	<u>3</u>
TOTAL		10
SECOND QUARTER		
CIS 265	Database Management Systems	3
CIS 234	C++ Programming II	4
CIS 280	Java Programming I	<u>4</u>
TOTAL		11
THIRD QUARTER		
CIS 285	Web Application Development with Java	4
CIS 236	C++ Programming III	4
COM 225	Small Group Communication	<u>3</u>
TOTAL		11

Fast Track Programmer Analyst Web Development

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
CIS 210	Computer Systems Analysis	3
CIS 233	C++ Programming I	4
CIS 112	Object Oriented Concepts	<u>3</u>
TOTAL		9
SECOND QUARTER		
CIS 234	C++ Programming II	4
CIS 265	Database Management Systems	3
CIS 280	Java Programming I	<u>4</u>
TOTAL		10
THIRD QUARTER		
CIS 130	Introduction to Web Development	3
CIS 284	Client/Server Web Tools	3
COM 225	Small Group Communication	<u>3</u>
TOTAL		9

Financial Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
FIN	105	Introduction to Financial Institutions	3
FIN	245	Personal Finance	3
BIS	201	Customer Service	3
			<hr/>
TOTAL			9
SECOND QUARTER			
FIN	200	Consumer Credit	3
MRK	201	Marketing I	3
BIS	M85	Microsoft Word	2
			<hr/>
TOTAL			8
THIRD QUARTER			
FIN	205	Commercial Credit	3
BIS	M45	Microsoft Excel	2
BIS	M35	Microsoft Access	2
			<hr/>
TOTAL			7

Short Term

Description

This certificate is designed to prepare students for initial entry into the financial services industry. Emphasis is on personal financial planning, consumer and commercial credit, marketing, customer service, and computer software skills. Students will gain knowledge of critical regulatory issues that face financial institutions today. With increasing frequency, entry level prospects are expected to have a working knowledge of MS Word, Excel, and Access.

Type of Degree or Certificate

Short Term Certificate

24 Total Credit Hours

Career Opportunities

Employment opportunities exist at banks, mortgage companies, savings and loans, credit unions, and broker firms in the following types of positions: teller, customer service representative, credit analyst, loan processor, back office operations, and special assignments.

Short Term

Description

The Help Desk Analyst certificate is designed to prepare students for entry level positions that provide technical support, assistance, hardware and software troubleshooting, system maintenance and training and documentation to computer users. This certificate includes general knowledge of computer hardware, operating systems, software and network operation, and specific skills in troubleshooting, problem solving and customer service. Course work in this program helps prepare students for help desk industry certification exams.

Type of Degree or Certificate

Short Term Certificate

44 Total Credit Hours

Career Opportunities

Common job titles include User Support Specialist, Customer Support Representative, Software Trainer, P.C. Technician and Help Desk Technician/Analyst.

Short Term

Description

This certificate provides the opportunity to develop and refine human resources skills. The curriculum covers laws and regulations related to employment, implications of decisions and their effect on employee motivation as well as the major functional areas of Human Resource Management. Also addresses human resources applications in benefits, training and development, recruitment and selection, compensation, performance planning, discipline and labor relations.

Type of Degree or Certificate

Short Term Certificate

18 Total Credit Hours

Help Desk Analyst

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	107	Introduction to Operating Systems	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
	161	or Intermediate Word, PowerPoint, & Excel	
COM	206	Interpersonal Communication	3
BIS	201	Customer Service	3
CIS	111	Introduction to Problem Solving & Computer Programming	4
			TOTAL
			16
SECOND QUARTER			
BIS	M31	Introduction to Access	1
BIS	M32	Intermediate Access	1
CIS	162	Microsoft Office Troubleshooting & Problem Solving	3
CIS	164	Introduction to User Support	3
COM	287	Effective Listening	3
MAN	210	Introduction to Project Management	3
			TOTAL
			14
THIRD QUARTER			
BIS	M70	Introduction to the Internet	1
BIS	M71	Intermediate Internet	1
CIS	264	A+ Certification	3
CIS	230	Computer Networks	3
CIS	238	P.C. Installation Management	3
CIS	166	User Support Tools & Techniques	3
			TOTAL
			14

Human Resource Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
MAN	205	Principles of Management	3
MAN	237	Human Resource Management	3
MAN	238	Human Resource Management Applications	3
MAN	225	Human Relations & Organizational Behavior	3
FIN	260	Employee Benefits	3
COM	235	Principles of Interviewing	3
			TOTAL
			18

Java Enterprise Development

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	112	Object Oriented Concepts or	3-4
	113	Object Oriented Design	
CIS	265	Database Management Systems or	3-4
	266	Client/Server Database	
			TOTAL
			6-8
SECOND QUARTER			
CIS	283	Advanced Java or	4-8
	280	Java Programming I and	
	281	Java Programming II	
CIS	285	Web Application Development with Java	4
			TOTAL
			8-12
THIRD QUARTER			
CIS	286	Enterprise Java	4
CIS	288	Java Enterprise Development Project Seminar	5
			TOTAL
			9

Network Engineering Associate

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	241	Cisco Networking Fundamentals	7
			TOTAL
			7
SECOND QUARTER			
CIS	242	Cisco Router Fundamentals	7
			TOTAL
			7
THIRD QUARTER			
CIS	243	Cisco Routing in LANs	7
			TOTAL
			7
FOURTH QUARTER			
CIS	244	Cisco Routing in WANs	7
			TOTAL
			7

Short Term

Description

The Java Enterprise certificate is designed for professional programmers who need to learn to develop applications in a Java Enterprise environment. This certificate focuses on designing and deploying enterprise application using Java related technologies.

Type of Degree or Certificate

Short Term Certificate

23-29 Total Credit Hours

BUS

Short Term

Description

This certificate program will provide students with state-of-the-art networking skills and is taught via the Cisco Networking Academy Curriculum, teaching all aspects for an introductory network engineering position. This program is designed to provide the knowledge and skills required to understand and participate in basic networking design, installation, programming and troubleshooting corporate network infrastructure. Included in this one-year program are networking theory, OSI model, networking media, physical and logical design, programming, installing, maintaining and troubleshooting networking equipment, designing and implementing IP schemas, the basics of all current internal routing protocols, beginning security information and safety.

Type of Degree or Certificate

Short Term Certificate

28 Total Credit Hours

Short Term

Description

This certificate is designed for persons who already have the equivalent of a two-year degree, who meet the experience requirement of the state Division of Real Estate, but lack course work in economics, corporation finance, human resource management, and business law. The real estate courses (RES) meets the educational requirement of 120 seat-hours for persons to be licensed to sell real estate in Ohio, and many students will have already completed these pre-license courses. All other courses in this certificate satisfy other portions of the state requirements to be a broker. In addition to the equivalent of two-year degree and experience as a sales agent, the state requires course work in economics (ECO 216) corporation finance (FIN 215), human resources management (MAN 225 or 237), and business law (LAW 101) to become licensed as a broker.

Type of Degree or Certificate

Short Term Certificate

29 Total Credit Hours

Short Term

Description

This certificate is designed for persons who are interested in a career in real estate sales. A portion of the course work meets the educational requirement of 120 seat-hours for persons to be licensed to sell real estate in Ohio. 40 hours of Real Estate Principles & Practices (RES 201), 40 hours of Real Estate Law (RES 203), and 20 hours of Real Estate Appraisal (RES 204) are the requirements of the Ohio Division of Real Estate. Other courses will give students skills in marketing sales, and business ownership, all of which are crucial to success as a real estate agent. Entrepreneurial skills such as business structure, management, record-keeping, and the legal aspects of business ownership are covered.

Type of Degree or Certificate

Short Term Certificate

24 Total Credit Hours

Ohio Real Estate Broker

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
RES	201	Real Estate Principles & Practices	4
RES	202	Real Estate Law	4
RES	203	Real Estate Finance	2
RES	204	Real Estate Appraisal for Realtors	2
MAN	205	Principles of Management	3
			TOTAL
			15
SECOND QUARTER			
FIN	215	Corporation Finance	3
LAW	101	Business Law I	4
MAN	225	Human Relations & Organizational Behavior	3
			or
	237	Human Resource Management	
ECO	216	Principles of Macroeconomics	4
			TOTAL
			14

Ohio Real Estate Sales Associate

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
RES	201	Real Estate Principles & Practices	4
RES	203	Real Estate Finance	2
BUO	105	Business Ownership Orientation	3
MRK	201	Marketing I	3
			TOTAL
			12
SECOND QUARTER			
RES	202	Real Estate Law	4
RES	204	Real Estate Appraisal for Realtors	2
MRK	202	Marketing II	3
MRK	225	Sales Fundamentals	3
			TOTAL
			12

Security for the Networking Professional

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	206	Network Security I	3
CIS	253	Securing a Windows Network Environment	<u>4</u>
TOTAL			7
SECOND QUARTER			
CIS	207	Network Security II	3
CIS	255	Securing a Unix/Linux Operating System	<u>4</u>
TOTAL			7

Small Office, Home Office Computer Use & Security

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	105	Computer Concepts	3
BIS	M75	The Internet	<u>2</u>
TOTAL			5
SECOND QUARTER			
CIS	101	Computer Networks & Security	3
CIS	M72	Cyber Security Tools	1
CIS	M73	Cyber Ethics	<u>1</u>
TOTAL			5

Short Term

Description

This certificate is designed for the networking professional or students who have completed the Network Manager track or the Network Engineer track in the CIS program. The certificate focuses on the technical skills necessary to assess security risks to existing networks. Students will learn to establish an information security plan and policy as well as learn to install and configure various security measures such as intrusion detection, data encryption, and other methods needed to decrease vulnerability.

Type of Degree or Certificate

Short Term Certificate

14 Total Credit Hours

BUS

Short Term

Description

This certificate provides the home or small business computer user with state-of-the-art networking and computer security skills. This certificate includes general and specific information and training on wired and wireless home networking equipment such as routers. Proper and ethical use of the Internet for research and guidelines for safely interacting with other users are also included.

Type of Degree or Certificate

Short Term Certificate

10 Total Credit Hours

Short Term

Description

This certificate provides office workers, managers, professionals, and those interested in acquiring knowledge for personal use the opportunity to develop and refine their skills in a variety of current software common in today's work environments. Software applications included are word processing, spreadsheet, database, business presentations, desktop publishing, and Internet browser.

BUS

Type of Degree or Certificate

Short Term Certificate

24 Total Credit Hours

Short Term

Description

The Tax Practitioner certificate prepares students for work in the tax preparation field. As Federal tax law changes and grows more complex, more people seek professional tax preparation assistance. The Tax Practitioner certificate covers both Federal, state and local tax law. Actual tax preparation for clients will take place through service learning providing valuable practical experience. The certificate also prepares interested students for the Enrolled Agents' Exam of the Internal Revenue Service.

Type of Degree or Certificate

Short Term Certificate

28 Total Credit Hours

Career Opportunities

Tax preparers may work for companies or work as entrepreneurs in their own businesses.

Software Application for the Professional

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	105	Computer Concepts	3
BIS	M35	Microsoft Access	2
BIS	M45	Microsoft Excel	2
BIS	M55	Microsoft PowerPoint	2
BIS	M75	The Internet	2
BIS	M85	Microsoft Word	2
TOTAL			13
SECOND QUARTER			
BIS	M25	Desktop Publishing	2
BIS	M36	Advanced/Expert Access	3
BIS	M46	Advanced/Expert Excel	2
BIS	M86	Advanced/Expert Word	2
BIS	172	Integrated Solutions	2
TOTAL			11

Tax Practitioner

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ACC	121	Principles of Financial Accounting	5
ACC	221	Federal Taxes I	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
TOTAL			11
SECOND QUARTER			
ACC	122	Principles of Managerial Accounting	5
ACC	222	Federal Taxes II	3
ACC	225	Professional Tax Preparation	3
TOTAL			11
THIRD QUARTER			
ACC	125	Personal Computer Applications in Accounting	3
ACC	223	Advanced Taxation	3
TOTAL			6

Web Authoring

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
BIS	M70	Introduction to the Internet	1
BIS	M71	Intermediate Internet	1
VIS	117	Web Page Design	3
TOTAL			8
SECOND QUARTER			
BIS	160	Introduction to Word, PowerPoint, & Excel	3
CIS	130	Introduction to Web Development	3
VIS	147	Digital Imaging	3
VIS	115	Digital Video	3
TOTAL			12
THIRD QUARTER			
CIS	131	Intermediate Web Development	3
VIS	265	Digital Authoring	3
MAT	105	Business Mathematics	4
ENG	121	Technical Composition I	3
TOTAL			13

Short Term

Description

This certificate uses web wizards and authoring tools such as FrontPage and Composer to develop web sites for individuals and small businesses with non-programming skills. Certificate focuses on authoring software such as FrontPage, Hypertext Markup Language, JavaScript, Vector Graphics, and Multimedia Scripting Languages.

Type of Degree or Certificate

Short Term Certificate

33 Total Credit Hours

BUS

Short Term

Description

The Web Programming certificate is designed to provide individuals with state-of-the-art web application development skills. It focuses on designing, writing and deploying web applications using the latest technologies. It is designed for experienced programmers to update their skills and for individuals wishing to make a career change into the Information Technology field. The certificate will focus on web application development in a client/server networked environment.

Type of Degree or Certificate

Short Term Certificate

36-37 Total Credit Hours

Web Programming Java Track

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	136	Introduction to XHTML	3
CIS	137	Introduction to JavaScript	3
CIS	130	Introduction to Web Development	3
CIS	265	Database Management Systems	3-4
		or	
	266	Client/Server Database	
		TOTAL	12-13
SECOND QUARTER			
CIS	131	Intermediate Web Development	3
CIS	280	Java Programming I	4
CIS	285	Web Application Development with Java	4
		TOTAL	11
THIRD QUARTER			
CIS	223	Extensible Markup Language	3
CIS	224	Web Server Administration & Security	4
CIS	143	Cold Fusion Markup Language	3
CIS	144	PERL Common Gateway Interface	3
		TOTAL	13

Web Programming

Visual Basic Track

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CIS	136	Introduction to XHTML	3
CIS	137	Introduction to JavaScript	3
CIS	130	Introduction to Web Development	3
CIS	265	Database Management Systems	3-4
		or	
	266	Client/Server Database	
			TOTAL
			12-13
SECOND QUARTER			
CIS	131	Intermediate Web Development	3
CIS	147	Visual Basic.Net Programming I	3
CIS	284	Client/Server Web Tools	3
			TOTAL
			9
THIRD QUARTER			
CIS	224	Web Server Administration & Security	4
CIS	223	Extensible Markup Language	3
CIS	143	Cold Fusion Markup Language	3
CIS	144	PERL Common Gateway Interface	3
			TOTAL
			13

Short Term

Description

The Web Programming certificate is designed to provide individuals with state-of-the-art web application development skills. It focuses on designing, writing and deploying web applications using the latest technologies. It is designed for experienced programmers to update their skills and for individuals wishing to make a career change into the Information Technology field. The certificate will focus on web application development in a client/server networked environment.

Type of Degree or Certificate

Short Term Certificate

34-35 Total Credit Hours

BUS

**www.sinclair.edu
my.Sinclair.edu**

Distance Learning



***Sinclair was
the most
important
reason for
my success.***

—Rick Andrews,
Graduate and
Chairperson,
Accounting



Department

Distance learning is a good alternative for motivated students who prefer flexible scheduling. Distance learning course content is the same as regular, on-campus courses and meets all program and transfer requirements. Distance learning courses also have the same low tuition rates and high quality instructors as traditional classes.

Distance learning courses are NOT easier than in-person courses. In addition to reading the text and e-lectures, taking tests and quizzes, students may also be expected to participate in their courses through such activities as weekly bulletin board postings and/or group projects. Plan on spending at least 6 hours per week study time for each distance learning course.

Distance Learning

Telephone

(937) 512-2990 or 1-888-226-2457,
FAX (937) 512-2891
Building 14, Second Floor, Room 14223
www.sinclair.edu/distance

Articulation Agreements

Capella University
Franklin University
Governors State University
UAW-Ford University Online
University of Cincinnati
University of Phoenix
University of Toledo
For more information, contact
Linda Stowe, (937) 512-2694, linda.
stowe@sinclair.edu.

Dr. Nancy Thibeault, Director
(937) 512-2354, Room 14001

Don Smith
Manager, Distance Learning Programs &
Support
(937) 512-2379, Room 14223

Sandee Arehart
Coordinator, Distance Services
(937) 512-2041, Room 14223

Linda Stowe
Coordinator, Distance Learning Services
(937) 512-2694, Room 14223

John Tomoser
Coordinator, Off-Campus Sites
(937) 512-3262, Room 14223

Sylvia Wenzel
Coordinator, Distance Learning Program
Delivery
(937) 512-5223, Room 14223

Academic Advising Office Hours

Monday-Thursday
8:00 a.m. - 7:00 p.m.

Friday
8:00 a.m. - 5:00 p.m.
(4:30 p.m. in summer)

Building 6, First Floor
(937) 512-3700

Distance Learning

Tips for the Distance Learner

For those who decide to try a distance learning course, it is recommended that students view a video tape entitled, "The Emerging Learner." This video tape contains a series of nine segments dealing with how to study, how to manage time, and how to get the most out of a distance learning course. This video tape can be obtained by stopping by the Distance Learning office, Building 14, Room 14223 or calling either (937) 512-2990 or toll free, 888-226-2457.

How to Succeed in Distance Learning

Distance learning offers a variety of course delivery formats that expand students' course options. Courses available online (via the Internet), and through video tape, print, or CD-ROM are convenient alternatives for Sinclair students. Most students succeed in distance learning courses, but there are some important considerations for students new to this mode of delivery. Please take a moment to review this comparison between traditional and distance learning courses.

Traditional Courses	Distance Learning Courses
<p>Content</p> <p>Traditional courses have specific learning objectives that the student must master and synthesize to pass the course.</p>	<p>Courses have the same content as traditional courses. They differ only in the delivery format.</p>
<p>Time</p> <p>Students who succeed in their courses spend at least two additional hours each week in study for each hour of in-class time. This means a time commitment of at least nine hours per week of in-class and study time for the typical 3 credit hour course.</p>	<p>Courses are convenient for students who like to work according to their own pace and schedule, but the time commitment necessary to succeed is the same or more as for traditional in-class courses. Courses contain deadlines for assignments and testing.</p>
<p>Structure</p> <p>Regular class attendance keeps students on track with their course work.</p>	<p>Students must have the self-discipline to keep up with their work throughout the quarter.</p>
<p>Support</p> <p>Traditional classes are inherently learning communities in which students can benefit from peer support and in-class discussions. Students also have ready access to their instructors if they have questions.</p>	<p>Online courses have some level of group activity, but video/print/CD-ROM formats do not. Instructors are accessible via e-mail or phone, but response time may not be as immediate.</p>

Distance Learning Course Delivery Formats

The Distance Learning program offers multiple options for students using alternative delivery formats and in-class sections at off-campus sites. Delivery formats include: online (via the Internet), videotape (VHS format), CD-ROM, and printed materials. Most of these courses have been developed by Sinclair faculty.

Although distance learning courses have no scheduled class meeting times, students must meet specific deadlines established by the instructor, and course requirements must be completed within the quarter of course enrollment as outlined in the course syllabus. This requires motivation and determination. Students must budget their time appropriately, keep up with the course requirements and take responsibility for completing the course by the end of the quarter. These courses sometimes take more time than traditional in-class courses. Distance learning can work for students who have the desire to succeed and who are able to work independently.

Description

<http://www.sinclair.edu/distance>

Through its Distance Learning program, Sinclair Community College offers convenient alternatives to students who want to earn college credit but who cannot come to campus to attend traditional classes. Taking courses in a distance learning format is a viable option for students who may have scheduling conflicts; work or family commitments; those who are homebound or live a distance from campus; or those who would rather study alone.

Students register for any distance learning course in the same manner they register for other Sinclair courses: telephone, online, or in-person registration. The cost for distance learning courses is the same as for other for credit courses and all course work must be completed within the quarter it is taken and as outlined in the course syllabus.

Distance learning courses are equivalent to their classroom counterparts in credit hours, transferability to other institutions, and fulfilling many degree program requirements. Distance learning courses encompass a broad range of disciplines across the college's curriculum.

The program offers more than 200 courses in a variety of study formats as well as a full complement of courses at neighborhood learning centers and via interactive broadcast video.

Distance Learning Registration Policy

Ongoing or returning Sinclair students will need a 2.0 minimum cumulative grade point average to enroll in Distance Learning courses. Students who are new to Sinclair can register for distance learning courses for which they meet prerequisites.

Late Registration Policy

Late registration for all distance learning courses ends the Friday before the first day of classes. No distance learning registrations will be accepted once the quarter has started.

Testing Information

Most online courses have online testing incorporated in the course. Courses that do not offer this option or courses delivered via videotape or other modes require that students living within 60 miles of the Dayton campus take their tests in the college Testing Center. (Information about testing will be included in the course syllabus.) A listing of the method of testing for each Distance Learning course per specific quarter can be found on the Distance Learning web site (www.sinclair.edu, click on "Testing Information").

Students who live beyond 60 miles of Dayton have the option of using a proctor to have their tests administered locally. It is the students' responsibility to obtain suitable proctors and proctors are not reimbursed for their time. More information and the proctor application form may be obtained on the Distance Learning web site (www.sinclair.edu/distance, click on "Testing Information").

Sinclair Online

These courses are available on the Internet. Using computers with modems and Internet access, students can retrieve information and assignments, send e-mail to the instructor and fellow students, participate in discussion forums, and link to other resources. A few online courses combine videotaped or CD lectures with the Internet format, but most are offered completely over the Internet. Students without personal computers and modems may use the computers located in the Sinclair Teleports.

System Requirements

Basic Computer Skills

To be successful in any online course, it is important that students are comfortable with performing the following:

- Logging into the course through **my.Sinclair** portal
- Using a web browser
- Opening and saving files
- Writing and editing documents
- Learning new computer skills
- Using your Sinclair e-mail account (**my.Sinclair.edu**) to send assignments

Minimum Hardware/Software Requirements

- Pentium-based (or higher) computer OR, a MacIntosh equivalent
- 56 kps modem (or higher)
- Microsoft Windows 98 or higher OR, Mac OS 9 or higher
- 24 MB RAM (or higher)
- 120-500 MB free hard-disk space
- CD drive
- My.Sinclair e-mail account
- WebCT compatible web browser

NOTE: For best results, set computer screen resolution to 1024 x 768. If larger text is preferred, set the screen to 800 x 640.

To change your screen resolution:

1. Right click anywhere on the Desktop.
2. Click on "Properties" from the dropdown menu.
3. Click on "Settings" tab.
4. Under "Screen Resolution" on the bottom left-hand side, adjust the slider to the desired pixels.
5. Click "OK."

Browser Information

The following browsers are recommended for use with courses in WebCT:

- Netscape version 6.2x, 7.0, and 7.1 (P.C.)
- Internet Explorer (IE) versions 5.0 through 7.0 (P.C.) [except IE 5.5 Service Pack 1 (P.C.)]
- AOL 7.0 and 8.0 (P.C.)

MAC

- IE 5.1 (OS 9.x and OS X 10.1) and 5.2 (OS X 10.1, 10.2, 10.3)
- Netscape 6.2x (OS 9.x and OS X), 7.0 and 7.1 (OS X)
- AOL OS X (Mac)
- Mozilla 1.5 (MAC: OS X)

For up-to-date system requirements, visit the "Online Course Information" section on the distance learning web site (www.sinclair.edu/distance).

Videotape/CD-ROM/Print Based Courses

Instead of attending courses in a classroom on campus, students enrolled in these courses can get course lectures in the form of videotapes or print based copy. The CD-ROM is a tutorial format. All materials for any of these courses can be purchased from the Sinclair Tartan Campus Store.

Televised Classes (Interactive)

By using audio, video, computers and other technologies, students are brought together from various sites in a live, interactive virtual classroom presentation that encourages active participation and exchange of information and ideas. The instructor teaches the course on campus at Sinclair from a state-of-the-art electronic classroom. The course is transmitted live to off-campus sites equipped with a special receiver antenna, a classroom monitor, and a telephone. Students in off-site locations can see and talk to the instructor and their fellow students in the campus class. They also take tests at the off-campus site.

These courses are ideal for students who have the desire to obtain college credit, but do not have the time to drive to Sinclair's campus. Courses are delivered live to area high schools, Wright-Patterson Air Force Base, businesses, career centers, and other sites located throughout the Miami Valley and beyond.

Textbooks by Mail

Students may purchase all the textbooks and related materials needed to take a course or complete a degree by contacting the Sinclair Tartan Campus Store at their web site: tartanstore.sinclair.edu. All orders will be shipped directly to the student for a small fee at the address requested. Please allow 2-4 weeks for delivery.

Basics About Distance Learning

Syllabus

Each distance learning course has a syllabus that lists course assignments and due dates. Obtain a syllabus for videotape, print, and CD-Rom courses from the Tartan Campus Store before the quarter begins. The syllabus for online courses is contained within the course and is available on the first day of the quarter.

Registration Deadline

All distance learning courses have class size limits, so register early! Distance learning courses begin at 8:00 a.m. on the first day of the term. Distance learning registrations cannot be accepted after that time.

Testing

Some distance learning testing is online, but many tests are given in the Testing Center. See the Distance Learning web site (www.sinclair.edu/distance) for specific testing information. Students living 60 miles or more beyond Dayton can obtain local proctors for their tests. See the web site for more information and deadlines.

Access to Online Courses

Available in each student's personal Sinclair e-mail account (**my.Sinclair.edu**). Technical or login assistance is available from the Help Desk at (937) 512-4357 or 1-866-781-4357.

Orientation

Those who wish to get a "feel" for online courses can visit the online orientation at www.sinclair.edu/distance, click on "Overview of Distance Learning."

Classes Start

As soon as the term begins. Distance learning courses are structured like in-class courses and run the entire length of the term. All assignments and tests must be completed within the term the course is taken.

Classes End

On the last day of the term. After that, access to online courses is unavailable.

Questions?

Consult the Distance Learning web site www.sinclair.edu/distance or e-mail distance@sinclair.edu or call (937) 512-2990 or toll-free 1-888-226-2457.

Sinclair Degrees Attainable Through Distance Learning

Associate of Arts: Liberal Arts & Sciences

The Associate of Arts degree program in Liberal Arts & Sciences is designed for students who are planning to transfer to four-year colleges or universities and pursue baccalaureate degree programs such as education, English, geography, history, modern languages, philosophy, political science, psychology, social work, sociology, etc. The curriculum the freshman and sophomore general education requirements of most four-year colleges and universities. In addition, this degree will fulfill the requirements for the Ohio Transfer Module at other Ohio public colleges and universities. Ninety percent of the courses in this degree are available in a distance format.

Associate of Science: Business Administration

Upon completion of this degree is designed to provide students with junior status as they pursue baccalaureate degrees rather than immediate preparation for jobs. This is a model only. Transfer requirements may differ with each transfer institution. Each four-year institution reserves the right to determine how courses are transferable to their institution, and students should contact the schools to which they plan to transfer and check transferability of credits. Individual transfer (articulation) agreements with specific colleges and universities have been developed for the benefit of the students. Ninety percent of the courses in this degree are available in a distance format.

Sinclair Certificates Attainable Through Distance Learning

Digital Systems Short Term Certificate

This short term certificate will attest that students have achieved advanced skill ad training in digital systems and will prepare them for further professional growth. The certificate consists of four rigorous courses. (Note that required lab work can be completed on campus or at selected high schools.)

Fast Track Programmer Analyst

This certificate is designed to provide an individual with state-of-the-art programming skills. It is designed for experienced programmers or selected individuals wishing to make a career change into the information technology field. The certificate will focus on the latest programming languages, database theory, object oriented concepts, and team building. Students have the option to concentrate on enterprise development or web development technologies. One hundred percent of the courses in this certificate are available in a distance format.

Java Enterprise Development Certificate

The Java Enterprise Development certificate is designed to provide an individual with state-of-the-art Java programming skills. It focuses on designing, writing and deploying enterprise applications using Java-related technologies. It is designed for experienced programmers wishing to broaden their skills. The cornerstone of the certificate is a Java object oriented based approach applied to three-tiered (N-tiered) enterprise client/server model.

Students are expected to have over five years of programming or systems development experience, or equivalent education and experience. Students not meeting the above admission requirements are encouraged to investigate the Fast Track certificate, which is designed for students wishing a career change into information technology. Fifty percent of the courses in this certificate are available in a distance format.

Software Applications for the Professional

This short term certificate provides office workers, managers, professionals, and those interested in acquiring knowledge for personal use the opportunity to develop and refine their skills in a variety of current software common in today's work environments. Software applications included are word processing, spreadsheet, database, business presentations, desktop publishing, and Internet browser. One hundred percent of the courses in this certificate are available in a distance format.

Web Programming

The Web Programming certificate is designed to provide an individual with state-of-the-art web application development skills. It focuses on designing, writing, and deploying web applications using the latest technologies. It is designed for experienced programmers to update their skills and for individuals wishing to make a career change into the information technology field. The certificate will focus on web application development in a client/server networked environment. One hundred percent of the courses in this certificate are available in a distance format.

The following courses are available through Distance Learning formats. Note that every course is not offered every quarter.

Course	Title
ACC 121	Principles of Financial Accounting
ACC 122	Principles of Managerial Accounting
ACC 221	Federal Taxes I
ACC 222	Federal Taxes II
ACC 240	Microcomputer Accounting Systems
ALH 103	Introduction to Health Care Delivery
ALH 104	Allied Health Informatics
ALH 121	Allied Health Management
ALH 142	Fundamentals of Disease Processes
ALH 219	General Pharmacology
ARC 107	Architectural Building Codes
ARC 138	Architectural Blueprint Reading
ART 101	Art Appreciation: Introduction to Art
ART 102	Art Appreciation: Art Media
ART 125	African Art
ART 235	History of Photography
ART 236	History of Women Artists
ASE 101	The Freshman Experience
AST 101	Survey of Astronomy
AST 111	Introduction to Astronomy
AUT 100	Basic Automotive Systems
BIO 104	HIV/AIDS
BIS 101	P.C. Keyboarding
BIS 102	Document Formatting
BIS 105	Computer Concepts
BIS 136	Introduction to Medical Terminology
BIS 137	Intermediate Medical Terminology
BIS 138	Advanced Medical Terminology
BIS 160	Introduction to Word, PowerPoint, & Excel
BIS 161	Intermediate Word, PowerPoint, & Excel
BIS 201	Customer Service
BIS 202	Advanced Customer Service Concepts
BIS M25	Desktop Publishing
BIS M35	Microsoft Access
BIS M36	Advanced/Expert Access
BIS M45	Microsoft Excel
BIS M46	Advanced/Expert MS Excel
BIS M55	Microsoft PowerPoint
BIS M85	Microsoft Word
BIS M86	Advanced/Expert Word
BIS M75	The Internet
CAP 105	Career Selection
CCT 103	Civil Construction Blueprints & Drafting
CCT 105	Properties of Construction Materials
CCT 120	Introduction to Construction Trades
CCT 206	Structural Analysis II
CCT 216	Construction Estimating
CCT 256	Construction Management
CCT 258	Project Management Techniques

Course	Title
CHE 120	Introduction to Chemistry
CIS 107	Introduction to Operating Systems
CIS 112	Object Oriented Concepts
CIS 130	Introduction to Web Development
CIS 131	Intermediate Web Development
CIS 134	Macromedia Flash
CIS 136	Introduction to HTML
CIS 137	Introduction to JavaScript
CIS 143	Cold Fusion Markup Language
CIS 144	PERL Common Gateway Interface
CIS 147	Visual Basic Programming I
CIS 210	Computer Systems Analysis
CIS 223	Extensible Markup Language
CIS 224	Web Server Administration & Security
CIS 230	Computer Networks
CIS 231	UNIX I
CIS 233	C++ Programming I
CIS 265	Data Base Management Systems
CIS 284	Client Server Web Tools
COM 206	Interpersonal Communication
COM 225	Small Group Communication
DEV 065	Developmental Reading
DEV 085	Basic Mathematics II
DEV 108	Introduction to Algebra
DEV 110	Introduction to Composition
DIT 111	Introduction to Foods & Nutrition
EBE 100	Prior Learning Portfolio Development
ECO 105	General Economics
ECO 216	Principles of Macroeconomics
EET 114	Basic Electronic Measurements
EET 150	Electrical Circuits & Instruments I
EET 155	Electrical Circuits & Instruments II
EET 201	Electronics I
EET 207	Linear Integrated Circuits
EET 231	Digital Logic & Circuits
EET 251	Digital Systems I
ENG 111	English Composition I
ENG 112	English Composition II
ENG 113	English Composition III
ENG 121	Technical Composition I
ENG 122	Technical Composition II
ENG 132	Business Communications II
ENG 255	Creative Writing (Poetry)
ENG 256	Creative Writing (Fiction)
ETD 128	Print Reading with GD&T
ETD 198	Personal Computer Applications in Engineering Technology
ETD 199	Introduction to Computer Aided Drafting (CAD) Concepts
ETD 213	Statics
ETD 222	Strength of Materials
EVT 110	Environmental Compliance

Course	Title
EXL 105	Study Skills
FIN 245	Personal Finance
FST 170	Technical Rescue Awareness
HIM 121	Basic Medical Terminology
HIM 122	Specialized Medical Terminology
HIM 135	Medicolegal Aspects of Health Care Records
HIM 235	Health Record Statistics
HIM 260	ICD-9-CM Medical Office Coding
HIM 261	CPT Medical Office Coding
HIM 262	Advanced Medical Office Coding
HIS 101	U.S. History (1607-1815)
HIS 102	U.S. History (1815-1919)
HIS 103	U.S. History (1919-present)
HIS 111	Western Civilization (0-1300)
HIS 112	Western Civilization (1300-1815)
HIS 113	Western Civilization (1815-present)
HIS 214	History of Southeast Asia
HUM 125	The Human Image
HUM 130	Humanity & the Challenge of Technology
HUM 135	Environmental Ethics
INT 141	Applied Shop Mathematics I
INT 142	Applied Shop Mathematics II
INT 143	Applied Shop Mathematics III
LAW 101	Business Law I
LAW 102	Business Law II
LAW 103	Consumer Law
LAW 144	Domestic Protection Orders
LEP 130	Family Violence
LIT 205	Modern Short Story
MAN 105	Introduction to Business
MAN 205	Principles of Management
MAN 207	Total Quality Management
MAN 225	Human Relations & Organizational Behavior
MAN 251	Logistics Management
MAS 101	Introduction to Medical Assisting
MAS 103	Medical Law & Ethics
MAS 202	Insurance & Patient Records
MAT 101	Elementary Algebra
MAT 102	Intermediate Algebra
MAT 105	Business Mathematics
MAT 116	College Algebra
MHT 101	Introduction to Mental Health Work
MHT 140	Child & Adolescent Mental Health
MRK 201	Marketing I
MRK 202	Marketing II
MRK 236	Consumer Behavior
MUS 125	History of Rock Music
NSG 258	Strategies & Techniques for Test Taking
NSG 291	Drug Therapy Update I
NSG 293	Cardiovascular Drugs

Course	Title
NSG 294	Psychotropic Drugs
NSG 295	Drugs for Pain Management
NSG 296	Endocrine Drugs
PAR 115	Contract Law & the Uniform Commercial Code
PAR 244	Ohio Protection Orders
PAR 247	Legal Technology Resources
PHI 205	Introduction to Philosophy
PHY 100	Introduction to Physics
PHY 104	Sound, Light & Modern Physics
PLS 101	American Federal Government I
PLS 102	American Federal Government II
PSY 119	General Psychology
PSY 121	General Psychology I
PSY 122	General Psychology II
PSY 126	Stress Management
PSY 135	Living with Loss, Death, & Grief
PSY 141	Love & Personal Growth
PSY 205	Child Development
PSY 206	Adolescent & Adult Psychology
PSY 208	Life Span Human Development
PSY 217	Abnormal Psychology
PSY 225	Social Psychology
PUR 201	Purchasing Principles
QET 201	Statistical Process Control
RAT 199	Computers in Medical Imaging
RAT 219	Pharmacology for Radiographers
RAT 243	Principles of Magnetic Resonance Imaging
RAT 244	Magnetic Resonance Imaging Applications
RAT 250	Quality Management in Radiography
RET 118	Cardiopulmonary Rehabilitation
SOC 111	General Sociology I
SOC 112	General Sociology II
SOC 115	Today's Changing Family
SOC 120	General Sociology
SOC 130	Family Violence
SOC 145	Comparing Cultures
SOC 205	Social Problems
SOC 210	Rural Communities
SOC 215	Cultural Diversity
SOC 225	Juvenile Delinquency
SOC 227	Probation & Parole
SRM 101	Introduction to Safety Engineering Technology
SRM 211	Applied Industrial Risk Management
SRM 212	Hazard Control Analytical Methods
SRM 231	OSHA Construction Standards
THE 105	Introduction to Theatre I
THE 201	History of Theatre I
THE 202	History of Theatre II

Neighborhood Center Classes

Students attend college for many reasons: to pursue a degree, to update their knowledge and enhance career advancement opportunities, or simply to take courses for personal enrichment. Sinclair's off-campus credit centers are a convenient alternative for busy students. Classes are taught by full- and part-time faculty at the following locations throughout the Miami Valley:

Centerville High School

500 East Franklin Street
Centerville

Dwight L. Barnes Community and Continuing Education Center

3700 Far Hills Avenue
Kettering

Eaton High School

600 Hillcrest Drive
Eaton

Kettering Fairmont High School

3301 Shroyer Road
Kettering

Miami Valley Career Technical Center

6800 Hoke Road
Clayton

Miami Valley Research Park

1900 Founders Drive
Dayton

Miamisburg High School

1860 Belvo Road
Miamisburg

Northmont High School

4916 West National Road
Engelwood

V.A. Medical Center

4100 West Third Street
Dayton

Wayne High School

5400 Chambersburg Road
Huber Heights

Wright-Patterson Air Force Base

(All classes are held in areas B and C)

Driving instructions to all off-campus sites can be found on the Distance Learning web site (www.sinclair.edu/distance) by clicking on "Off-Campus Sites" and then selecting the specific location.

Engineering & Industrial Technologies



My goals are more achievable with Sinclair's flexible schedule.

— Sherri Wright



Departments

Planning the Program

Students are required to complete the course work for a particular engineering technology program to earn a degree. Some courses have prerequisites. Others must be taken in special sequences. Many require completion of a year sequence in technical mathematics and technical physics. Students entering these programs from high school should have completed at least one year of algebra. Advanced high school mathematics is advisable. Students who need development in mathematics will be required to enroll in a DEV sequence depending on Skills Assessment results. **Students should plan a course of study with an Engineering & Industrial Technologies counselor, Room 6130, (937) 512-2282.**

High School Outreach Activities

Throughout the year, the Engineering & Industrial Technologies division supports recruiting activities in the greater Dayton area high schools. Engineers Day is held each February on the Sinclair campus. This event provides an opportunity for students to see labs and hear about different career paths. In June, the division hosts the Women In Engineering Technologies (WIET) Institute for high school girls entering grades 11 and 12. This free, two-week event involves hands-on lab experiences in many different program areas. For further information regarding these programs, contact Deborah Shuler at (937) 512-5342.

University Parallel Transfer Degree Programs

Students choosing a career in Engineering Science may select a University Parallel program. The Engineering Science (University Parallel, Associate of Science degree) program is for students who plan to transfer to a four-year college or university for a degree in Engineering Science. This program is designed to bring entering students up to the level of third year university students in Engineering Science. Course sequence is designed to

Academic Advising Office Hours

Monday-Thursday
8:00 a.m. - 7:00 p.m.

Friday
8:00 a.m. - 5:00 p.m.
(4:30 p.m. in summer)

Building 6, First Floor
(937) 512-3700

Engineering & Industrial Technologies

transfer the basic requirements of most universities. Students are strongly advised to consult the particular school they will be entering as well as a Sinclair academic counselor, before signing up for different courses. **Students who wish to earn an associate degree in Engineering Science must complete the last thirty hours at Sinclair in order to meet residency requirements. Exceptions to this requirement must be approved in advance in writing by the dean of Engineering & Industrial Technologies.**

Note: University of Dayton/Sinclair Dual Admission – Students planning a future in engineering technology should consider dual admission to Sinclair and the University of Dayton. Students who complete an associate degree in a qualifying Engineering & Industrial Technologies major at Sinclair will be assured admissions to a corresponding program at U.D. with junior level standing. Upon becoming active U.D. students, they will receive an annual one-third tuition scholarship. Also, students will have access to some University of Dayton and Sinclair facilities while attending both institutions. Call (937) 512-2282 for details.

Career Degree Programs

Many of the Engineering & Industrial Technologies career programs are transferable to colleges and universities toward the bachelor of applied science, bachelor of engineering technology or bachelor of technology programs. These programs also prepare students for employment in architectural, automotive, civil construction, engineering technology design, electronics, electromechanical, aviation, environmental, fire science, industrial, manufacturing, mechanical, plastics and composites, quality engineering and safety/risk management and tooling and machining technologies. Graduates will receive an Associate of Applied Science degree from Sinclair. **Students pursuing a degree that is accredited by a national accrediting association must meet the association's requirements for class attendance at Sinclair.**

Dr. George Sehi, Dean
(937) 512-2918, Room 3133

Karen Blake
Academic Counselor
(937) 512-2282, Room 6130

Jana Lehman
Academic Counselor
(937) 512-2282, Room 6130

Deborah Shuler
Project Manager
(937) 512-5342, Room 11243

Mike Freed
Manager, Industry Engagement
(937) 512-5012, Room 3134

W. Terry Maiwurm
Manager, Engineering & Industrial Technologies Cooperative Education
(937) 512-2508, Room 3120

**Architectural Technology
Civil Engineering Technology
Heating, Ventilating, Air Conditioning &
Refrigeration Technology**
Albert Wahle, Chairperson
(937) 512-2183, Room 11426

**Automotive Technology
Automotive Service Educational Program
(ASEP)**

**Chrysler Dealer Apprenticeship Program (CAP)
American Honda Certificate Program
Ford Maintenance & Light Repair Certificate
Automotive High Performance Certificate**
Stephen Ash, Chairperson
(937) 512-3242, Room 20244

Aviation Technology
Walt Davis, Chairperson
(937) 512-2242, Room 3134

**Industrial Engineering Technology
Manufacturing Engineering Technology Option
Quality Engineering Technology**
Shep Anderson, Chairperson
(937) 512-2311, Room 13210

**Automation & Control Technology with
Robotics**

Electronics Engineering Technology
Surinder Jain, Chairperson
(937) 512-2570, Room 3134

**Engineering Science (University Parallel)
Engineering Technology Design**
Chairperson
(937) 512-2242, Room 3134

**Fire Science Technology
Safety Engineering Technology
Environmental Engineering Technology**
Dr. Nicholas Scambilis, Chairperson
(937) 512-3242, Room 20244

**Computer Aided Manufacturing
CNC Technology Option
Precision Machining Option**
Gene Chambers, Chairperson
(937) 512-2570, Room 3134

Articulation Agreements

Section I + Engineering Science University Parallel

University of Dayton	Civil Engineering Chemical Engineering Computer Engineering Electrical Engineering Mechanical Engineering MEE – Aeronautical Engineering
Kettering University	Computer Science Applied Mathematics Applied Physics Applied Environmental Chemistry Engineering
Miami University (Oxford)	Engineering Management Manufacturing Engineering
Ohio Northern University	Industrial Technology
Wright State University	Biomedical Engineering Computer Engineering Electrical Engineering Human Factors Engineering Mechanical Engineering Materials Science/Engineering Engineering Physics

Section II + Engineering & Industrial Technologies

University of Cincinnati College of Applied Science	Architectural Engineering Technology Civil Engineering Technology Construction Management Option Electronics Engineering Technology Engineering Technology Design Open Learning Fire Science Technology
University of Dayton	Electronics Engineering Technology Industrial Engineering Technology Manufacturing Engineering Technology Mechanical Engineering Technology Engineering Technology Design
DeVry Institute of Tech.	Electronics Engineering Technology
Ferris State University	Facilities Management Automotive Engineering Technology Construction Management Electrical/Electronics Engineering Technology Manufacturing Engineering Technology Product Design Engineering Technology Plastics Engineering Technology Engineering Technology Design HVACR Engineering Technology
Miami University (Middletown)	Automation & Control Technology Electronics Engineering Technology Engineering Technology Design
Northern Kentucky University	Architectural Engineering Technology Civil Engineering Technology Construction Management Option Industrial Engineering Technology Manufacturing Engineering Technology Option Engineering Technology Design
Purdue University	Industrial Engineering Technology
University of Toledo	Civil Engineering Technology Construction Management Option Electronics Engineering Technology

Engineering Technology University Parallel Program

The Engineering Technology University Parallel Program (ETUP) is a brand new program designed for students that may want to continue on to a four-year institution, but also have options within their associate degree. The program is structured under the Engineering Technology Design curricula. Students can transfer directly to universities that offer various engineering technology degrees, or opt to take a pathway that provides them specialized knowledge in an engineering technology discipline focused toward employment upon graduation with their associate degree. No other engineering technology program allows this flexibility and rapid degree attainment. For further details, please see the program description under Engineering Technology Design.

Engineering Technology Design Specialties

These specialty areas take the basic Engineering Technology University Parallel program principles that all engineering technologists need to have and combine them with skills specifically needed for employment in the Mechanical/CAD design fields. These specialty areas are flexible in design so students can customize the courses of concentration that they take in the program.

University Parallel Description

Students choosing a career in Engineering Science may select a University Parallel program. The Engineering Science (University Parallel, Associate of Science degree) program is for students who plan to transfer to a four-year college or university for a degree in Engineering Science. This program is designed to bring entering students up to the level of third year university students in Engineering Science. Course sequence is designed to transfer the basic requirements of most universities. Students are strongly advised to consult the particular school they will be entering as well as a Sinclair academic counselor, before signing up for different courses. **Students who wish to earn an associate degree in Engineering Science must complete the last thirty hours at Sinclair in order to meet residency requirements.** Exceptions to this requirement must be approved in advance in writing by the dean of Engineering & Industrial Technologies.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

105 Total Credit Hours

Transfer to Four Year

Note: University of Dayton/Sinclair Dual Admission – Students planning a future in engineering technology should consider dual admission to Sinclair and the University of Dayton. Students who complete an associate degree in qualifying Engineering & Industrial Technologies major at Sinclair will be assured admissions to a corresponding program at U.D. with junior level standing. Upon becoming active U.D. students, they will receive an annual one-third tuition scholarship. Also, student will have access to some University of Dayton and Sinclair facilities while attending both institutions. Call (937) 512-2282 for details.

U.T./Sinclair Distance Education program for the Computer Engineering Technology program.

Engineering Science

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
ETD	128 Print Reading with GD&T	3
ENG	111 English Composition I	3
MAT	201 Calculus & Analytic Geometry I	5
PHY	201 General Physics I	6
TOTAL		17
SECOND QUARTER		
ENG	112 English Composition II	3
IET	198 Computer Programming Applications in Engineering Technology	2
MAT	202 Calculus & Analytic Geometry II	5
PHY	202 General Physics II	6
—	Social Science Elective*	3
TOTAL		19
THIRD QUARTER		
CHE	151 General Chemistry I	5
ENG	113 English Composition III	3
MAT	203 Calculus & Analytic Geometry III	5
PHY	203 General Physics II	6
TOTAL		19
FOURTH QUARTER		
CHE	152 General Chemistry II	5
COM	211 Effective Speaking I	3
ETD	199 Introduction to Computer-Aided Drafting Concepts	2
MAT	216 Elements of Linear Algebra	4
ETD	260 Engineering Technology Applications with Computers	3
TOTAL		17
FIFTH QUARTER		
ETD	211 Engineering Mechanics I	5
MAT	215 Differential Equations	5
—	Social Science Elective*	3
—	Humanities Elective*	3
TOTAL		16
SIXTH QUARTER		
ETD	212 Engineering Mechanics II	5
—	Social Science Elective*	3
—	Humanities Elective*	6
—	Engineering Technical Elective	3
TOTAL		17

*See page 80.

Architectural Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ARC	101	Architectural Drafting	3
ARC	105	Construction Materials & Methods	5
COM	206	Interpersonal Communication	3
ETD	198	Personal Computer Applications for Engineering Technology	2
MAT	131	Technical Mathematics I	5
			5
TOTAL			18
SECOND QUARTER			
ARC	102	Architectural Detail Drafting	4
CCT	103	Civil Construction Blueprints & Drafting	3
ENG	111	English Composition I	3
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
MAT	132	Technical Mathematics II	5
			5
TOTAL			17
THIRD QUARTER			
ARC	107	Architectural Building Codes	3
ARC	135	Architecture Design I	2
ARC	199	Advanced 2-D CAD	2
CCT	105	Properties of Construction Materials	3
ENG	112	English Composition II	3
PHY	131	Technical Physics I	4
			4
TOTAL			17
FOURTH QUARTER			
ARC	103	3-D Design & Architectural Modeling	3
ARC	240	Architectural Design Studio II: Structure	4
		Engineering Technical Elective	3
ETD	213	Statics	4
ARC		Architectural Technology Elective	3
			3
TOTAL			17
FIFTH QUARTER			
ARC	211	Building Systems Design	3
ARC	241	Architectural Design Studio III: Construction Documents	4
CCT	256	Construction Management	3
ETD	222	Strength of Materials	4
		Social Science Elective*	3
			3
TOTAL			17
SIXTH QUARTER			
ARC	278	Architectural Technology Capstone	5
CCT	206	Reinforced Concrete Design	4
ARC		Architectural Technology Elective	3
		Humanities Elective*	3
ARC	270	Architectural Technology Internship	3
			3
TOTAL			18

*See page 80.

Career Program

Description

Architectural Technology is designed to develop student skills for efficient application of the arts and sciences related to the building construction industry. Spacious laboratories contain the latest high tech equipment. Emphasis is on developing architectural drafting skills, both manual and computer-aided.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

104 Total Credit Hours

Transfer to Four Year

The Architectural Technology program can be a good starting point to transfer to an architectural engineering four-year program. The educational sequence can lead to becoming a registered architect.

Career Opportunities

Graduates are employed as drafters for architectural firms, inspectors, and project managers in the construction industry.

EGR

Career Program

Description

The Automation & Control Technology with Robotics program builds knowledge in the application of electrical and mechanical skills for developing, installing, programming, and troubleshooting the complex machinery found in the modern manufacturing environment.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

107 Total Credit Hours

Career Opportunities

Computer and office machine repair technician, control system technician and designer, electrical and electronic systems engineering technician, industrial equipment sales, purchasing, installation, and service, industrial maintenance technician, maintenance/troubleshooting, manufacturing technician, plant maintenance technician, non-HVAC, prototyping and research, retrofitting/upgrading, robotic and non-robotic system integration engineering technician.

Automation & Control Technology with Robotics

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
EGR 100	Fundamental Mechanical Skills	3
EGR 161	Pbasic & Stamp	3
ETD 101	Introduction to Engineering Design	3
MAT 131	Technical Mathematics I	5
EET 119	Basic Electrical Circuits & Controls	4
TOTAL		18
SECOND QUARTER		
MAT 132	Technical Mathematics II	5
EGR 128	Robotics in CIM Systems	4
ENG 111	English Composition I	3
EET 198	Digital Technology	3
PHY 207	Logic	3
_____	or Humanities Elective*	
TOTAL		17
THIRD QUARTER		
EER 139	Electrical Machinery	4
EGR 144	Sensors	3
EGR 252	Teach Pendant Robot Programming	3
EGR 231	Introduction to Troubleshooting of Automated Systems	3
ETD 128	Print Reading with GD&T	3
EET 281	Programmable Logic Controllers	3
TOTAL		19
FOURTH QUARTER		
EER 166	Industrial Machine Wiring & Standards	3
EGR 217	Fluid Power & Control	4
EGR 220	Machine Vision	3
EGR 210	Human-Machine Interfaces (HMIs)	3
SRM 211	Applied Industrial Risk Management	3
EET 282	Advanced Programmable Logic Controllers	3
TOTAL		19
FIFTH QUARTER		
EGR 255	Industrial Networking	3
EGR 232	Advanced Troubleshooting of Automated Systems	3
EGR 244	Automation & Control Devices	3
_____	Engineering Technical Elective	3
COM 206	Interpersonal Communication	3
_____	or	
_____	Effective Speaking I	
ENG 112	English Composition II	3
TOTAL		18
SIXTH QUARTER		
EGR 278	Automated Manufacturing Project	3
_____	Social Science Elective*	3
IET 130	Lean Manufacturing	
PHY 131	Technical Physics I	4
_____	Engineering Technical Elective	3
TOTAL		16

*See page 80.

Automotive Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
AUT	124	Electrical/Electronic Systems Level I	5
AUT	165	Automotive Brake System	5
INT	141	Applied Shop Mathematics I	3
ETD	198	Personal Computer Applications for Engineering Technology	<u>2</u>
			TOTAL 15
SECOND QUARTER			
AUT	125	Electrical/Electronic Systems II	7
AUT	108	Engine Systems	5
COM	206	Interpersonal Communication	3
	—	General Education Elective	<u>3</u>
			TOTAL 18
THIRD QUARTER			
AUT	115	Engine Performance I	7
AUT	146	Automotive Heating & Air Conditioning	5
ENG	111	English Composition I	3
	—	Technical Elective	<u>3</u>
			TOTAL 18
FOURTH QUARTER			
AUT	241	Automatic Transmissions	7
AUT	142	Manual Transmissions & Drive Line	5
SRM	211	Applied Industrial Risk Management	3
INT	109	Fundamentals of Tool & Manufacturing Processes	<u>4</u>
			TOTAL 19
FIFTH QUARTER			
AUT	245	Engine Performance II	7
AUT	210	Steering, Suspension & Alignment	5
ENG	112	English Composition II	<u>3</u>
			TOTAL 15
SIXTH QUARTER			
AUT	215	Automotive Service Operations	10
	—	Humanities Elective*	3
AUT	111	Automotive Management	<u>3</u>
			TOTAL 16

*See page 80.

The Automotive Technology program also supports the General Motors ASEP (Automotive Service Education Program), the Chrysler CAP (Chrysler Dealer Apprenticeship Program) and the American Honda programs. These programs are two-year associate degree programs in which students alternate between college training and a paid dealership work experience. For further information about these programs, contact the department chairperson.

Career Program

Description

Fully accredited by the National Automotive Technicians Education Foundation, the Associate of Applied Science in Automotive Technology provides training for students aspiring to become automotive technicians. Training in automotive management is also presented in the comprehensive program. Graduates are finding excellent employment opportunities existing in dealerships, independent services facilities, machine shops and corporate service franchises. Some graduates may also find employment as sales representatives, parts managers, service managers and as automotive instructors.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

101 Total Credit Hours

Career Opportunities

Entry level positions for automotive service technicians are available in dealerships, independent garages, service stations, and automotive machine shops. In addition, graduates are also employed as sales representatives for parts manufacturers and distributors, as claims adjusters for insurance companies, and as automotive service instructors. Graduates with practical experience, education, a willingness to work, and a high degree of professionalism may expect to move into management positions.

EGR

Career Program

Description

This is the primary degree in the Aviation Technology program which leads to an Associate of Applied Science in Aviation Technology. The students, having completed this course work, would have the background and skills to either continue on for a bachelor's degree in Aviation Science (or related field), or start a flying career as a pilot with the addition of required flying ratings.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

90-95 Total Credit Hours

Transfer to Four Year

Transfer to four year degree in Aviation Science (or related field)

Career Opportunities

Conservative estimates predict there will be 70,000 aviation technician and pilot openings over the next 10 years. A growing demand for worldwide air travel, explosive growth of fractional ownership corporations, an increase in aircraft production, and the fact that over half of the current professional technician work force will retire in the next 10 years means thousands of high paying jobs for people with the right training.

AVT Track Technical Electives:

Track I Flight

AVT 110	Ground School Primary Flight
AVT 120	Primary Flight
AVT 160	Ground School Instrument
AVT 220	Instrument Flight Training

Track II Maintenance

AVT 143	Aircraft Maintenance
AVT 202	Aircraft Pneumatics & Hydraulics
AVT 228	Aircraft Engines
AVT 248	Aircraft Structures

Track III Management

AVT 230	Airport Planning & Management
EGR 206	Engineering Technology Economics
MAN 105	Introduction to Business
MRK 225	Sales Fundamentals

Aviation Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
ENG 111	English Composition I	3
AVT 105	Orientation to Aviation	3
AVT 125	Developments in Aviation	3
MAT 116	College Algebra	5
	or	
	131 Technical Mathematics I	
ETD 198	Personal Computer Applications for Engineering Technology	2
TOTAL		16
SECOND QUARTER		
MAT 117	Trigonometry	4-5
	or	
	132 Technical Mathematics II	
	Humanities Elective*	3
AVT 245	Aviation Law	3
AVT 111	Navigation Science I	3
TOTAL		13-14
THIRD QUARTER		
PHY 141	College Physics I	4
	or	
	131 Technical Physics I	
ENG 112	English Composition II	3
AVT 119	Aviation Meteorology	3
AVT 270	Aviation Internship	3
AVT 238	Aircraft Avionics	3
TOTAL		16
FOURTH QUARTER		
AVT _____	AVT Track Elective	3-4
_____	Technical Elective	3
_____	Technical Elective	3
_____	Technical Elective	3
AVT 211	Navigation Science II	3
TOTAL		15-16
FIFTH QUARTER		
AVT _____	AVT Track Elective	3-4
AVT 242	Aircraft Accident Investigation	3
AVT 240	Human Factors in Aviation	3
AVT 206	Aerodynamics	3
_____	Social Science Elective*	3
TOTAL		15-16
SIXTH QUARTER		
COM 206	Interpersonal Communication	3
AVT 247	Flight Controls	3
AVT 205	Aviation Management	3
AVT _____	AVT Track Elective	3-4
AVT _____	AVT Track Elective	3-4
TOTAL		15-17

*See page 80.

Aviation Technology

Maintenance Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
AVT 115 Ground Operations & Servicing	3
AVT 112 Performance Calculations	2
ENG 111 English Composition I	3
MAT 116 College Algebra	5
or	
ETD 131 Technical Mathematics I	
ETD 198 Personal Computer Applications for Engineering Technology	
TOTAL	<u>2</u> 15
SECOND QUARTER	
AVT 105 Orientation to Aviation	3
AVT 111 Navigation Science I	3
Humanities Elective*	3
AVT 117 Fluid Lines & Fittings	3
AVT 245 Aviation Law	3
MAT 117 Trigonometry	4-5
or	
132 Technical Mathematics II	
TOTAL	<u>19-20</u>
THIRD QUARTER	
ENG 112 English Composition II	3
AVT 229 Aircraft Finishes	3
AVT 238 Aircraft Avionics	3
AVT 119 Aviation Meteorology	3
PHY 131 Technical Physics I	4
or	
141 College Physics I	
TOTAL	<u>16</u>
FOURTH QUARTER	
AVT 218 Landing Gear	4
AVT 237 Airframe Inspections	2
AVT 206 Aerodynamics	3
AVT 247 Flight Controls	3
AVT 217 Hydraulics & Pneumatics Systems	3
TOTAL	<u>15</u>
FIFTH QUARTER	
AVT 242 Aircraft Accident Investigation	3
AVT 125 Developments in Aviation	3
AVT 240 Human Factors in Aviation	3
AVT 234 Reciprocating Engines III	3
Social Science Elective*	3
AVT 219 Turbine Engines	4
TOTAL	<u>19</u>
SIXTH QUARTER	
AVT 270 Aviation Internship	3
AVT 129 Propellers	5
AVT 138 Engine Fuel & Fuel Metering	5
AVT 205 Aviation Management	3
COM 206 Interpersonal Communication	3
TOTAL	<u>19</u>

*See page 80.

This program provides FAA licensed Aviation & Powerplant Mechanics with additional knowledge and training to obtain an associate's degree in Aviation Technology.

Career Program

Description

This option under the primary program is designed for students who have completed Sinclair's three certificate Aviation Maintenance Technology program or hold Airframe and Powerplant certificates granted by the Federal Aviation Administration (FAA). This degree program improves the students' career options in the aviation maintenance technology field by expanding on the students' fundamental knowledge of aviation maintenance, honing critical thinking skills, and developing management ability.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

103-104 Total Credit Hours

Career Opportunities

With retirements and technicians going to other fields the Department of Labor estimates a short fall of about 155,000 mechanics by the year 2006.

Airlines and other operators are retiring the oldest jet transports, but the newer aircraft must still be maintained. Maintenance Repair Organizations (M.R.O.'s) are contracting for the work that airlines used to do in house. Many of the M.R.O.'s are in need of maintenance technicians.

EGR

Career Program

Description

This option under the primary program is designed for students who want to pursue a career as a professional pilot. The course and lab work are determined by the Federal Aviation Administration (FAA). There are minimum flight hours, as well as practical test standards that students must pass.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

108-109 Total Credit Hours

Transfer to Four Year

This program contains the aviation knowledge and certifications necessary to work toward becoming a commercial airline pilot. In addition, students with this degree can enter into several four-year colleges with advanced standing to pursue a bachelor's degree.

Aviation Technology

Professional Pilot & Airway

Science Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
ETD	198	Personal Computer Applications for Engineering Technology	2
MAT	116	College Algebra	5
	131	or Technical Mathematics I	
AVT	110	Ground School/Private Pilot	4
AVT	120	Primary Flight	3
AVT	124	Flight Lab for AVT 120	1
			TOTAL
			18
SECOND QUARTER			
AVT	111	Navigation Science I	3
AVT	245	Aviation Law	3
AVT	105	Orientation to Aviation	3
AVT	160	Ground School/Instrument	4
		Humanities Elective*	3
MAT	117	Trigonometry	4-5
	132	or Technical Mathematics II	
			TOTAL
			20-21
THIRD QUARTER			
ENG	112	English Composition II	3
AVT	220	Instrument Flight	3
AVT	224	Flight Lab for AVT 220	1
AVT	238	Aircraft Avionics	3
AVT	119	Aviation Meteorology	3
PHY	131	Technical Physics I	4
	141	or College Physics I	
			TOTAL
			17
FOURTH QUARTER			
AVT	206	Aerodynamics	3
AVT	250	Commercial Pilot Ground School	3
AVT	253	Commercial Flight	4
AVT	247	Flight Controls	3
AVT	263	Flight Lab for AVT 253	1
AVT	211	Navigation Science II	3
			TOTAL
			17
FIFTH QUARTER			
AVT	255	Multi-Engine Operations	3
AVT	242	Aircraft Accident Investigation	3
AVT	256	Multi-Engine Flight	3
AVT	266	Flight Lab for AVT 256	1
AVT	240	Human Factors in Aviation	3
		Social Science Elective*	3
AVT	125	Developments in Aviation	3
			TOTAL
			19
SIXTH QUARTER			
COM	206	Interpersonal Communication	3
AVT	258	Flight Instructor Ground School	4
AVT	259	Instructor Flight	3
AVT	269	Flight Lab for AVT 259	1
AVT	205	Aviation Management	3
AVT	270	Aviation Internship	3
			TOTAL
			17

*See page 80.

Civil Engineering Technology**

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ARC	138	Architectural Blueprint Reading	3
CCT	102	Basic Construction Surveying	4
COM	206	Interpersonal Communication	3
ETD	198	Personal Computer Applications for Engineering Technology	2
MAT	131	Technical Mathematics I	5
			TOTAL
			17
SECOND QUARTER			
CCT	103	Civil Construction Blueprints & Drafting	3
CCT	105	Properties of Construction Materials	3
ENG	111	English Composition I	3
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
MAT	132	Technical Mathematics II	5
			TOTAL
			16
THIRD QUARTER			
CCT	246	Topographic Drawing & Mapping	4
CCT	256	Construction Management	3
ENG	112	English Composition II	3
PHY	131	Technical Physics I	4
—	—	Social Science Elective*	3
			TOTAL
			17
FOURTH QUARTER			
CCT	216	Construction Estimating	4
CCT	247	Highway Surveying & Design	3
ETD	213	Statics	4
MAT	133	Technical Mathematics III	5
			TOTAL
			16
THIRD QUARTER			
CCT	203	Subdivision Design	4
CCT	245	Soil Mechanics	4
CCT	258	Project Management Techniques	3
ETD	222	Strength of Materials	4
—	—	Humanities Elective*	3
			TOTAL
			18
SIXTH QUARTER			
CCT	206	Reinforced Concrete Design	4
CCT	248	Advanced Construction Layout	3
CCT	270	Civil Engineering Technology Internship	3
CCT	278	Civil Engineering Technology Capstone	4
PHY	132	Technical Physics II	4
			TOTAL
			18

* See page 80.

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Career Program

Description

In Civil Engineering Technology students are prepared to work as technicians in the planning, design, construction and operation of the built environment in the civilized world. TAC/ABET* accreditation assures high quality education in modern state-of-the-art laboratories with highly qualified faculty. A strong background in basics of architectural and civil construction and in-depth study of advanced topic such as surveying, construction management and structural analysis prepares students to produce and utilize construction documents and perform basic design and analysis. The curriculum is designed to maximize articulation to four-year programs emphasizing Civil Engineering Technology and Construction Engineering Technology.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

102 Total Credit Hours

Career Opportunities

Graduates of Sinclair's Civil Engineering Technology program find jobs as designers, managers, contractors, drafters, surveyors, and estimators for government agencies, consulting firms, building and design organizations, and contractors. In addition, careers are available with firms specializing in testing services.

Career Program

Description

This option in Civil Engineering Technology concentrates on developing technicians who can work in the construction process as drafters, surveyors, inspectors or management trainees with a curriculum that prepares an individual to progress to a management level in the exciting field of construction.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

102-105 Total Credit Hours

Track Electives:

Surveying Track

CCT	103	Civil Construction Blueprints & Drafting
CCT	203	Subdivision Design
CCT	246	Topographic Drawing & Mapping
CCT	247	Highway Surveying & Design
CCT	248	Advanced Construction Surveying

Construction Track

CCT	152	Light Frame Construction
CCT	153	Light Frame Structural Systems
CCT	154	Commercial Interiors
CCT	141	Portland /Cement Concrete Level I
EER	181	Electrical Construction

Civil Engineering Technology

Construction Management Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours	
FIRST QUARTER			
ARC	138	Architectural Blueprint Reading	3
CCT	102	Basic Construction Surveying	4
COM	206	Interpersonal Communication	3
ETD	198	Personal Computer Applications for Engineering Technology	2
MAT	131	Technical Mathematics I	5
			<u>17</u>
TOTAL			17
SECOND QUARTER			
CCT	_____	Civil Track Elective	3-4
CCT	105	Properties of Construction Materials	3
ENG	111	English Composition I	3
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
MAT	132	Technical Mathematics II	5
			<u>16-17</u>
TOTAL			16-17
THIRD QUARTER			
ARC	107	Architectural Building Codes	3
CCT	_____	Civil Track Elective	4
CCT	256	Construction Management	3
ENG	112	English Composition II	3
PHY	131	Technical Physics I	4
			<u>17</u>
TOTAL			17
FOURTH QUARTER			
CCT	216	Construction Estimating	4
CCT	240	Construction Law & Specifications	3
CCT	_____	Civil Track Elective	3-4
ETD	213	Statics	4
	_____	Social Science Elective	3
			<u>17-18</u>
TOTAL			17-18
FIFTH QUARTER			
CCT	_____	Civil Track Elective	4
CCT	245	Soil Mechanics	4
CCT	258	Project Management Techniques	3
ETD	222	Strength of Materials	4
	_____	Humanities Elective*	3
			<u>18</u>
TOTAL			18
SIXTH QUARTER			
CCT	242	Construction Management Personnel Issues	3
CCT	_____	Civil Track Elective	3-4
CCT	270	Civil Engineering Technology Internship	3
CCT	278	Civil Engineering Technology Capstone	4
SRM	231	OSHA Construction Standards	4
			<u>17-18</u>
TOTAL			17-18

*See page 80.

Computer Aided Manufacturing

CNC Technology Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
ETD 128 Print Reading with GD&T	3
ENG 121 Technical Composition I	3
IET 101 Work Methods Analysis & Improvement	3
INT 131 Basic Moldmaking	3
INT 111 Tool & Manufacturing Processes I	3
ETD 198 Personal Computer Applications for Engineering Technology	2
TOTAL	17
SECOND QUARTER	
IET 125 Introduction to World-Class Manufacturing	3
ETD 199 Introduction to Computer-Aided Drafting Concepts	2
ENG 122 Technical Composition II	3
INT 132 Advanced Moldmaking	3
INT 112 Tool & Manufacturing Processes II	3
QET 101 Survey of Total Quality	3
TOTAL	17
THIRD QUARTER	
ETD 280 Advanced Computer Aided Drafting	3
INT 165 Advanced Machine Operations Laboratory	4
MAT 131 Technical Mathematics I	5
IET 126 Supervision & Work Teams Leadership	3
INT 113 Fundamentals of CNC	3
TOTAL	18
FOURTH QUARTER	
IET 205 Manufacturing Processes	3
INT 114 Jig & Fixture Design	3
INT 211 Advanced Computer Numerical Control	3
HUM 132 Connecting Technology & Our Lives	3
INT 151 Principles of Welding	3
QET 100 Tooling & Machining Metrology	2
TOTAL	17
FIFTH QUARTER	
COM 211 Effective Speaking I	3
INT 114 Jig & Fixture Design	3
INT 204 Computer Numerical Control Lathe Programming	3
INT 212 Computer Assisted Programming	3
ENG 111 English Composition I	3
INT 145 Shop Floor Programming	3
TOTAL	18
SIXTH QUARTER	
QET 113 Coordinate Measurement	3
INT 213 Computer Numerical Control Applications	3
INT 209 Computer Numerical Control Wire Electrical Discharge Machining Programming	3
IET 216 Industrial Facilities Layout	4
— General Education Elective*	3
— Social Science Elective*	3
TOTAL	19

*See page 80.

Career Program

Description

Course work includes tool and manufacturing processes, computers in engineering technology, quality control, and CNC applications, to name a few. Facilities and equipment rank among the best in the nation with over four million dollars in conventional machining equipment and computer numerical control machines for laboratory use by the students. Employment opportunities are available as planners, methods specialists, technicians, and computer numerical control programmers.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

106 Total Credit Hours

Career Opportunities

Employment is available for foremen, planners, methods specialists, technicians, and computer numerical control programmers. Career opportunities have been plentiful for graduates, with over 90% working within their career fields.

EGR

Career Program

Description

Graduates of the Project STEP II certificate program are candidates for completion of the two-year associate degree option in Tooling & Manufacturing. More in-depth focus is given to enhancing communication and mathematical skills. A greater development of knowledge in industrial courses is also emphasized including such areas as tool design, computer numerical control, jig and fixture design, process engineering, and value engineering.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

103-104 Total Credit Hours

Computer Aided Manufacturing Precision Machining Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ETD	128	Print Reading with GD&T	3
INT	109	Fundamentals of Tool & Manufacturing Processes	4
INT	141	Applied Shop Mathematics I	3
INT	161	Machine Operations Laboratory I	8
QET	100	Tooling & Machining Metrology	2
			TOTAL
			20
SECOND QUARTER			
INT	113	Fundamentals of CNC	3
INT	142	Applied Shop Mathematics II	3
INT	162	Machine Operations Laboratory II	8
ETD	230	Introduction to Geometric Dimensioning & Tolerancing	3
			TOTAL
			17
THIRD QUARTER			
		INT Technical Elective	3-4
INT	143	Applied Shop Mathematics III	3
INT	163	Machine Operations Laboratory III	8
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
			TOTAL
			16-17
FOURTH QUARTER			
INT	114	Jig & Fixture Design	3
INT	211	Advanced Computer Numerical Control	3
MAT	101	Elementary Algebra	4
ENG	111	English Composition I	3
ETD	198	Personal Computer Applications for Engineering Technology	2
			TOTAL
			15
FIFTH QUARTER			
IET	205	Manufacturing Processes	3
INT	212	Computer Assisted Programming	3
INT	225	Tool Design	3
MAT	131	Technical Mathematics I	5
ENG	112	English Composition II	3
			TOTAL
			17
SIXTH QUARTER			
COM	211	Effective Speaking I	3
		Humanities Elective*	3
IET	206	Value Engineering	3
INT	213	Computer Numerical Control Applications	3
		Social Science Elective*	3
INT		INT Technical Elective	3
		or	
	270	Industrial Technology Internship	
			TOTAL
			18

*See page 80.

Computer Aided Manufacturing

Mechanical Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
QET	131	Fundamentals of Metallurgy & Material Science	3
INT	151	Principles of Welding	3
IET	125	Introduction to World-Class Manufacturing	3
IET	101	Work Methods Analysis & Improvement	3
ENG	111	English Composition I	3
ETD	128	Print Reading with GD&T	3
TOTAL			18
SECOND QUARTER			
ENG	121	Technical Composition I	3
IET	126	Supervision & Work Teams Leadership	3
QET	101	Survey of Total Quality	3
MAT	131	Technical Mathematics I	5
ETD	198	Personal Computer Applications for Engineering Technology	2
IET	105	Industrial Metrics Conversion	2
TOTAL			18
THIRD QUARTER			
ENG	122	Technical Composition II	3
IET	205	Manufacturing Processes	3
ETD	104	Introduction to Design Realization Process	3
QET	132	Metallurgy	3
—	—	INT Elective	6
TOTAL			18
FOURTH QUARTER			
IET	206	Value Engineering	3
EER	115	Essentials of Electricity	3
—	—	INT Elective	6
—	—	Social Science Elective*	3
TOTAL			15
FIFTH QUARTER			
EGR	206	Engineering Technology Economics	3
—	—	INT Elective	9
COM	211	Effective Speaking I	3
—	—	Humanities Elective*	3
TOTAL			18
SIXTH QUARTER			
IET	216	Industrial Facilities Layout	4
QET	201	Statistical Process Control	3
—	—	General Education Elective*	3
INT	—	INT Technical Elective	3
—	—	or	
—	270	Industrial Technology Internship	3
—	—	INT Elective	3
TOTAL			16

*See page 80.

Career Program

Description

This option is designed to place greater emphasis and understanding on the more theory oriented areas of engineering technology. Courses include such areas as: work methods analysis, computer program applications in engineering, value engineering, process engineering, industrial facilities layout, and statistical process control. Several credit hours of industrial electives are offered to allow students an opportunity to specialize in specific areas such as computer numerical control programming, and computer integrated workcells.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

103 Total Credit Hours

EGR

Career Program

Description

This program provides students with exciting opportunities to put engineering concepts into practice. The curriculum balances instruction in theory with hands-on laboratory applications. A strong background in basics and in-depth study of advanced topics gives students careers in diversified areas, such as digital systems, microcomputers, programmable logic controllers, and analog systems. The program is TAC/ABET accredited and thereby assures quality education in modern state-of-the-art equipped laboratories and a highly qualified faculty. Those who wish to further their studies are well prepared for entry into the best four-year BSEET programs.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

107 Total Credit Hours

Transfer to Four Year

Several articulation agreements exist between Sinclair's EET program and four-year colleges and universities.

Career Opportunities

Employment opportunities for electronics technicians are available as electronics service and maintenance technicians, or as computer field service technicians.

This program also transfers to four-year BSEET programs.

***Approved EET Electives:

EET 156	Introduction to Fuel Cells	3
EET 226	Electronic Communication Systems I	3
EET 227	Electronic Communication Systems II	3
EET 256	Alternative Energy Sources	3
EET 264	P.C. Troubleshooting & Repair I	3
EET 265	P.C. Troubleshooting & Repair II	3
EET 270	EET Internship	3-6
EET 283	Introduction to Lasers	3
EET 284	Optoelectronics	3
EET 281	Programmable Logic Controllers	3
EET 282	Advanced Programmable Logic Controllers	3

Electronics Engineering Technology**

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
EET	114	Basic Electronic Measurements	3
EET	121	Electronics Workshop	3
MAT	131	Technical Mathematics I	5
ENG	111	English Composition I	3
ETD	198	Personal Computer Applications for Engineering Technology	2
			TOTAL
			16
SECOND QUARTER			
EET	116	Electronics Schematics & Layout	3
EET	150	Electrical Circuits & Instruments I	4
MAT	132	Technical Mathematics II	5
		Social Science Elective*	3
ENG	112	English Composition II	3
			TOTAL
			18
THIRD QUARTER			
EET	155	Electrical Circuits & Instruments II	4
EET	259	Programming for Electronics Technology	3
MAT	133	Technical Mathematics III	5
PHY	131	Technical Physics I	4
		Social Science Elective*	3
			TOTAL
			19
FOURTH QUARTER			
EET	201	Electronics I	4
EET	205	Electrical Circuits & Instruments III	3
EET	231	Digital Logic & Circuits	4
PHY	132	Technical Physics II	4
COM	206	Interpersonal Communication	3
			TOTAL
			18
FIFTH QUARTER			
EET	202	Electronics II	3
EET	207	Linear Integrated Circuits	4
EET	251	Digital Systems I	4
EET	261	Microprocessor/Microcontroller Systems	4
EET	270	EET Internship	3
		or	
		EET Elective***	
			TOTAL
			18
SIXTH QUARTER			
EET	252	Digital Systems II	4
EET	262	Microprocessor Applications	4
EET	278	Electronics Project Capstone	4
EET	270	EET Internship	3
		or	
		EET Elective**	
		General Education Elective*	3
			TOTAL
			18

Students planning to transfer to a BSEET program should substitute MAT 131-132-133 series with MAT 102-116-117 and Technical Physics series PHY 131-132 with PHY 141-142 courses for better transfer of credits. Transfer credits are determined by the accepting institution.

*See page 80.

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Engineering Technology Design

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
ETD 101 Introduction to Engineering Design	3
ETD 118 Introduction to the Product Realization Process	1
ETD 121 Skills for the Engineering Technology Professional	3
MAT 131 Technical Mathematics I	5
COM 211 Effective Speaking I	3
ETD 128 Print Reading with GD&T	3
TOTAL	18
SECOND QUARTER	
EET 198 Digital Technology	3
EGR 128 Robotics in CIM Systems	3
ENG 111 English Composition I	3
MAT 132 Technical Mathematics II	5
ETD 102 Principles of Engineering	3
TOTAL	17
THIRD QUARTER	
CCT 258 Project Management Techniques	3
ENG 112 English Composition II	3
ETD 110 Engineering Design & Development	3
PHY 131 Technical Physics I	4
QET 101 Survey of Total Quality	2
QET 171 Lab for QET 101	1
TOTAL	16
FOURTH QUARTER	
QET 132 Metallurgy	2
QET 133 Non-Metallic Materials & Processes	2
QET 173 Lab for QET 132	1
QET 174 Lab for QET 133	1
QET 201 Statistical Process Control	2
QET 181 Lab for QET 201	1
ETD 202 Applied Statics and Dynamics	4
ETD _____ Track Elective	3
TOTAL	16
FIFTH QUARTER	
ETD 228 Emerging Technology Tools	1
ETD _____ Track Elective	5
ETD _____ Track Elective	4-5
ETD 222 Strength of Materials	4
HVA 286 Fluid Mechanics	4
TOTAL	18-19
SIXTH QUARTER	
ETD 238 Product Development & Testing	2
ETD 270 Engineering Technology Design Internship	3
ETD 278 Engineering Technology Design Capstone	4
ETD _____ Track Elective	3-4
_____ Humanities Elective *	3
_____ Social Science Elective*	3
TOTAL	18-19

*See page 80.

Career Program

Description

The Engineering Technology Design program provides the courses needed to become employed or continue education in a number of different engineering technology disciplines. Options include the Mechanical CAD track and the Engineering Technology University Parallel track, developing knowledge and skills to be successful in a diverse number of fields and companies.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

103-105 Total Credit Hours

Transfer to Four Year

The Engineering Technology University Parallel track supports transfer to universities in a variety of technology bachelor programs. The degree is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology which assures quality and nationally recognized excellence.

Career Opportunities

The CAD design technician track is designed to train students to be part of design teams in a number of different manufacturing fields. There is an ever growing need for individuals with these skills.

Track Electives:

Engineering Technology University Parallel:

CHE 151, IET 205, PHY 132, QET 100

CAD Design Technician:

ETD 240, ETD 245, ETD 284, ETD 291

EGR

Career Program

Description

This program prepares students for entry level positions in the field of environmental engineering technology. The curriculum provides a background in environmental laws and regulations, air and water pollution, groundwater studies, site assessments, emergency response to situations involving hazardous chemicals/wastes; storage, treatment, and disposal of hazardous wastes, sampling and analysis; and remediation. Skills and knowledge acquired will lead to possible employment in consulting, industrial and government organizations. The program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering & Technology (TAC-ABET).

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

106 Total Credit Hours

Transfer to Four Year

The program prepares students to work as environmental engineering technicians or continue their education and obtain a bachelor's degree in Environmental Engineering.

Career Opportunities

This is an excellent career field for both men and women who are looking for non-traditional and challenging hands-on occupations. Graduates from this program can find employment opportunities around the world.

Track Electives:

Industrial Hygiene

Fourth Quarter

SRM 215 Industrial Hygiene 3

Fifth Quarter

SRM 217 Industrial Toxicology 3

Sixth Quarter

SRM 219 Industrial Hygiene Instrumentation 3

Track Electives:

Hazardous Material Management

Fourth Quarter

EVT 215 Asbestos Management 3

Fifth Quarter

EVT 216 Lead Management 3

Sixth Quarter

EVT 217 Confined Space Management 2

SRM 152 OSHA 1910.120 Hazardous Waste Operations & Emergency Response Refresher 1

Environmental Engineering Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
EVT	110 Environmental Compliance	3
EVT	120 Environmental Sampling & Analysis	3
ENG	111 English Composition I	3
MAT	131 Technical Mathematics I	5
BIO	107 Human Biology	5
		<u>5</u>
		TOTAL 19
SECOND QUARTER		
EVT	200 Environmental Waste Management	4
ENG	112 English Composition II	3
MAT	132 Technical Mathematics II	5
ETD	198 Personal Computer Applications for Engineering Technology	2
		<u>5</u>
CHE	151 General Chemistry I	5
		<u>5</u>
		TOTAL 19
THIRD QUARTER		
CHE	152 General Chemistry II	5
CHE	121 Introduction to Organic Chemistry	4
EVT	210 Environmental Site Assessment	4
MAT	133 Technical Mathematics III	5
		<u>5</u>
		TOTAL 18
FOURTH QUARTER		
MAT	122 Statistics I	4
SRM	151 OSHA 1910.120 Hazardous Waste Operations	5
PHY	141 College Physics I	4
EVT	— EVT Fourth Quarter Track Elective	3
		<u>3</u>
		TOTAL 16
FIFTH QUARTER		
EVT	106 Air Pollution Control	3
EVT	107 Water Management Technology	3
EVT	260 Treatment, Storage, & Disposal of Hazardous Materials	3
HUM	135 Environmental Ethics	3
COM	211 Effective Speaking I	3
EVT	— EVT Fifth Quarter Track Elective	3
		<u>3</u>
		TOTAL 18
SIXTH QUARTER		
EVT	278 Environmental Capstone	3
EVT	265 Remediation	3
EVT	240 Groundwater/Basic Fluid Mechanics	4
EVT	180 Solid Waste Management	3
EVT	— EVT Sixth Quarter Track Elective	3
		<u>3</u>
		TOTAL 16

Fire Science Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
FST	101	Introduction to Fire Science	4
FST	102	Fire Protection & Organization	4
ENG	111	English Composition I	3
MAT	116	College Algebra	5
			TOTAL
			16
SECOND QUARTER			
FST	116	Fire Protections Systems I	3
FST	125	Fire Investigation Procedure	4
FST	202	Building Construction	4
ETD	198	Personal Computer Applications for Engineering Technology	2
MAT	117	Trigonometry	4
			TOTAL
			17
THIRD QUARTER			
FST	103	Fire Prevention Fundamentals, Codes, & Ordinances	4
CHE	151	General Chemistry I	5
PHY	141	College Physics I	4
ARC	107	Architectural Building Codes	3
ETD	128	Print Reading with GD&T	3
			TOTAL
			19
FOURTH QUARTER			
FST	201	Fire Hydraulics	5
SRM	221	Safety & Health Program Management	3
ENG	112	English Composition II	3
PHY	142	College Physics II	4
			TOTAL
			15
FIFTH QUARTER			
FST	204	Water Suppression Systems	4
SRM	230	Occupational Safety & Health	3
COM	211	Effective Speaking I	3
PLS	101	American Federal Government I	3
—		Humanities Elective*	3
			TOTAL
			16
SIXTH QUARTER			
FST	218	Plans Review for Fire Safety	3
FST	220	Fire Protection Systems Design	4
FST	270	Fire Science Technology Internship	3
FST	278	Fire Administration Capstone	4
SRM	151	OSHA 1910.120 Hazardous Waste Operations	5
			TOTAL
			19

*See page 80.

Career Program

Description

This program provides a full range of courses which address fire and safety issues. The program prepares students for careers in fire protection, inspection, arson investigation, emergency response, and fire administration. Courses include fire protection systems design, fire investigation, fire codes, safety management, building construction, hazardous materials, and administrative issues. Real-world experience is gained through internship with a fire department, fire inspection services or arson investigation companies. Graduates are prepared to enter the work force as fire engineering technicians and work as fire/safety officers in general industry or construction firms; design firms specializing in sprinkler systems or fire protection design; arson investigators, fire inspectors.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

102 Total Credit Hours

Transfer to Four Year

Graduates are prepared to continue their education and obtain a bachelor's degree in Fire Engineering.

Career Opportunities

Employment is available in municipal fire protection, industrial safety, and fire and safety organizations. In many firefighting occupations, certification may be necessary, depending on local policies, state laws, and the particular organization.

Career Program

Description

This program provides a full range of courses which address fire administration and safety issues. Courses include Firefighter II, Fire Officer I-IV, management, economics, state/local government, accounting and administrative issues. Students may also receive certification in Fire Administration.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

106 Total Credit Hours

Transfer to Four Year

The program prepares students for careers as fire officers, fire investigators, fire instructors and fire administrators.

Career Opportunities

Graduates are prepared to enter the work force as firefighters, fire officers, investigators, instructors and fire administrators or continue their education and obtain a degree in Fire Engineering or business management.

Fire Science Technology Fire Administration Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
FST	193 Firefighter II Transition	8
MAT	101 Elementary Algebra	4
ENG	111 English Composition I	3
ACC	121 Principles of Financial Accounting	5
		<u>20</u>
SECOND QUARTER		
FST	251 Fire Officer Level I	8
CHE	151 General Chemistry I	5
ENG	112 English Composition II	3
ETD	198 Personal Computer Applications for Engineering Technology	2
		<u>18</u>
THIRD QUARTER		
FST	252 Fire Officer Level II	4
MAN	205 Principles of Management	3
COM	211 Effective Speaking I	3
MAT	102 Intermediate Algebra	5
FST	____ Fire Science Technology Elective	3
		<u>18</u>
FOURTH QUARTER		
FST	253 Fire Officer Level III	4
QET	101 Survey of Total Quality	2
QET	171 Lab for QET 101	1
PLS	103 State Government	3
FST	____ Fire Science Technology Elective	4
ECO	105 General Economics	3
		<u>17</u>
FIFTH QUARTER		
FST	254 Fire Officer Level IV	4
FST	202 Building Construction	4
PLS	104 Urban Government	3
FST	____ Fire Science Technology Elective	4
		<u>15</u>
SIXTH QUARTER		
SRM	151 OSHA 1910.120 Hazardous Waste Operations	5
	____ Social Science Elective*	3
	____ Humanities Elective*	3
FST	____ Fire Science Technology Elective	7
		<u>18</u>

*See page 80.

Heating, Ventilating, Air Conditioning & Refrigeration Engineering Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
ARC 138 Architectural Blueprint Reading	3
ENG 111 English Composition I	3
MAT 131 Technical Mathematics I	5
ETD 198 Personal Computer Applications for Engineering Technology	2
HVA 144 Introduction to HVAC Systems	3
TOTAL	16
SECOND QUARTER	
ENG 112 English Composition II	3
MAT 132 Technical Mathematics II	5
ETD 199 Introduction to Computer-Aided Drafting Concepts	2
HVA 170 Air & Water Distribution Systems	5
HVA 184 Basics of Cooling & Cooling Systems	3
TOTAL	18
THIRD QUARTER	
ARC 139 Mechanical Systems Blueprint Reading	2
EET 119 Basic Electrical Circuits & Controls	4
HVA 180 Boilers in the HVAC Systems	3
HVA 174 Building Psychrometrics & Load Calculations	5
HVA 250 Industrial Process Exhaust	3
TOTAL	17
FOURTH QUARTER	
ARC 199 Advanced 2-D CAD	2
COM 206 Interpersonal Communication	3
PSY 229 Work Group Dynamics	3
HVA 186 Modern Refrigeration Practice	3
HVA 253 Advanced HVAC Applications	3
HVA 240 Principles of Process Control	3
TOTAL	17
FIFTH QUARTER	
ENG 199 Text Editing	3
HVA 276 Current Topics in Heating, Ventilating & Air Conditioning	3
HVA 243 Controls for Building HVAC Systems	3
HVA 254 Advanced HVAC Applications II	3
HVA 272 Mechanical Cost Estimating	3
TOTAL	15
SIXTH QUARTER	
EGR 132 Connecting Technology & Our Lives	3
PHY 131 Technical Physics I	4
HVA 177 Testing, Adjusting & Balancing in HVAC Systems	3
HVA 278 HVACR Applications Capstone Project	6
TOTAL	16

*See page 80.

Career Program

Description

This degree is designed for entry level students pursuing careers in the HVACR industries, as well as experienced technicians in need of upgrade training. The program focuses on the basic operating principles of commercial and industrial HVAC systems, allowing one to pursue careers in sales, service, design, facilities operation, project management, or as a laboratory technician for an equipment manufacturer. These principles are presented through lecture and laboratory exercises in a step-by-step fashion by addressing refrigeration, heating, distribution, filtration and control as individual subsystems. Upper level courses tie the subsystems together to discuss how they interact, providing the HVACR technician or designer with a wealth of knowledge regarding proper system operation.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

99 Total Credit Hours

Transfer to Four Year

Accreditation by the Technology Accreditation Commission or the Accreditation Board for Engineering Technology allows graduates to pursue a bachelor's degree.

Career Opportunities

The HVACR industry includes sales and design engineers, project managers, service and installation technicians, service and installation managers, consulting engineers, estimators, lab technicians/ technologists, designers for architectural and engineering firms, mechanical contractors, engineering development and many, many more career paths.

Note: Those courses associated with HVACR now have a prefix of HVA.

Career Program

Description

Industrial Engineering Technology (IET) graduates work in manufacturing settings and in service organizations such as hospitals, banks, communications companies, consulting firms, and the federal government. This program allows graduates to help optimize processes and reduce costs for an employer. This can include looking at ergonomics (machine interface), floor layout, work measurement, and robotic work cell layouts (among others). Students take part in lecture-lab structured courses and hands-on demonstrations of course principles assuring students will gain practical knowledge as well as the fundamentals. The program is TAC/ABET accredited assuring quality education in modern state-of-the-art equipped laboratories with highly qualified faculty.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

108 Total Credit Hours

Transfer to Four Year

Those who wish to further their studies may transfer to the best four-year colleges and universities. An articulation agreement exists between Sinclair's IET program and the University of Dayton's with a tuition reduction.

Career Opportunities

Graduates of this program can seek employment as manufacturing technologists, foremen, planners, methods specialists, and I.E. technicians. Career opportunities have been plentiful for graduates, with over 95% working within their career field.

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering & Technology (TAC-ABET), 111 Market Place Suite 1050, Baltimore, Maryland 21202, phone: (410) 347-7700.

Industrial Engineering Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
IET	101	Work Methods Analysis & Improvement	3
ENG	111	English Composition I	3
ETD	128	Print Reading with GD&T	3
MAT	131	Technical Mathematics I	5
IET	115	Survey of Production Control	2
TOTAL			16
SECOND QUARTER			
IET	126	Supervision & Work Teams Leadership	3
IET	111	Work Measurement Techniques	4
ENG	112	English Composition II	3
IET	198	Computer Quantitative Analysis in Engineering Technology	2
MAT	132	Technical Mathematics II	5
TOTAL			17
THIRD QUARTER			
ENG	113	English Composition III	3
ETD	198	Personal Computer Applications for Engineering Technology	2
ETD	199	Introduction to Computer Applications for Engineering Technology	2
MAT	133	Technical Mathematics III	5
PHY	131	Technical Physics I	4
IET	125	Introduction to World-Class Manufacturing	3
TOTAL			19
FOURTH QUARTER			
EGR	252	Teach Pendant Robot Programming	3
IET	205	Manufacturing Processes	3
IET	130	Lean Manufacturing	3
PSY	229	Work Group Dynamics	3
PHY	132	Technical Physics II	4
QET	101	Survey of Total Quality	2
QET	171	Lab for QET 101	1
TOTAL			19
FIFTH QUARTER			
IET	135	Manufacturing Cost Analysis	3
IET	112	Industrial Ergonomics	3
IET	207	Manufacturing System Analysis	3
QET	201	Statistical Process Control	2
QET	181	Lab for QET 201	1
IET	_____	IET Elective	3
EGR	128	Robotics in CIM Systems	4
TOTAL			18
SIXTH QUARTER			
IET	216	Industrial Facilities Layout	4
	_____	General Education Elective	3
IET	208	Engineering Technology Economics	3
COM	211	Effective Speaking I	3
EGR	132	Connecting Technology & Our Lives	3
	_____	or Humanities Elective*	
IET	278	Manufacturing Capstone	3
TOTAL			19

*See page 80.

Industrial Engineering Technology

Manufacturing Engineering Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ETD	128	Print Reading with GD&T	3
IET	101	Work Methods Analysis & Improvement	3
IET	125	Introduction to World-Class Manufacturing	3
MAT	131	Technical Mathematics I	5
ETD	198	Personal Computer Applications for Engineering Technology	2
QET	101	Survey of Total Quality	2
QET	171	Lab for QET 101	1
TOTAL			19
SECOND QUARTER			
ETD	199	Introduction to Computer Applications for Engineering Technology	2
ENG	111	English Composition I	3
INT	109	Fundamentals of Tool & Manufacturing Processes	4
MAT	132	Technical Mathematics II	5
PLA	106	Introduction to Plastics Technology	4
TOTAL			18
THIRD QUARTER			
ENG	112	English Composition II	3
INT	113	Fundamentals of CNC	3
MAT	133	Technical Mathematics III	5
PHY	132	Technical Physics II	4
QET	132	Metallurgy	2
QET	173	Lab for QET 132	1
PHY	131	Technical Physics I	4
TOTAL			18
FOURTH QUARTER			
EET	119	Basic Electrical Circuits & Controls	4
ENG	113	English Composition III	3
ETD	213	Statics	4
IET	115	Survey of Production Control	2
PHY	132	Technical Physics II	4
TOTAL			17
FIFTH QUARTER			
COM	211	Effective Speaking I	3
EGR	128	Robotics in CIM Systems	4
		General Education Elective*	3
IET	126	Supervision & Work Teams Leadership	3
IET	205	Manufacturing Processes	3
ETD	222	Strength of Materials	4
TOTAL			20
SIXTH QUARTER			
		Humanities Elective*	3
IET	130	Lean Manufacturing	3
IET	278	Manufacturing Capstone	3
QET	201	Statistical Process Control	2
QET	181	Lab for QET 201	1
ETD	230	Introduction to Geometric Dimensioning & Tolerancing	3
IET		Track Elective	3
TOTAL			18

*See page 80.

Career Program

Description

Sinclair's Manufacturing Engineering Technology program provides students the opportunity to acquire these highly valued skills in an innovative, hands-on learning environment. The program features integrating manufacturing experiences through which students participate in all aspects of a manufacturing enterprise. Armed with these skills, graduates can pursue rewarding, growth oriented careers in such diverse industries as plastics, automotive, medical product, electronics, machining, and other high value manufacturing sectors.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

110 Total Credit Hours

Transfer to Four Year

Graduates may further their studies by transferring to a number of four-year colleges and universities.

Career Opportunities

Graduates of this program can seek employment as manufacturing technicians, operations technicians, process planners, quality analysts, production control specialists, computer numerical control programmers, production team leaders, foremen, and many other manufacturing careers.

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering & Technology (TAC-ABET), 111 Market Place Suite 1050, Baltimore, Maryland 21202, phone: (410) 347-7700.

Career Program

Description

This program provides students with the knowledge and skills necessary to understand the competitive pressures and customer demands of all producers of consumer and industrial products. It prepares students to apply the mathematics and basic laws of physics to the non-destructive testing of mechanical and electronic systems, develop quality improvement programs, employ reliability management techniques and apply systematic problem solving to the solution of technical problems. It includes planning, organizing, managing, measuring and analyzing product quality within any company. Graduates are qualified to employ statistical processes to solve quality problems within any manufacturing, industrial or service organization where improvement of quality performance is desired.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

102 Total Credit Hours

Career Opportunities

Graduates of Sinclair's Quality Engineering Technology program find careers as quality analysts, quality technicians, inspectors, auditors, engineers, and managers. With the current emphasis on quality and customer satisfaction, the placement rate is nearly 100%, with many graduates receiving multiple employment offers.

Packaging option candidates vie for similar occupations in addition to creative designers and numerous other positions in business and industry. Employment opportunities in this area have grown tremendously with recent concerns about product tampering, waste disposal, and recycling.

Technical Electives

QET 231	ISO 9000/16949 Internal Auditor	3
QET 123	Eddy Current Testing	2
QET 124	Industrial Radiography	3
QET 125	Ultrasonic Testing	3
QET 126	Liquid Penetrant & Magnetic Particle Testing	3
QET 133	Non-Metallic Materials	3
QET 235	CQA Review Course	3
QET 200	Certified Quality Technician Review	3
QET 245	Certified Quality Manager Review	3
QET 215	Certified Reliability Engineer Review	3
QET 114	Advanced Coordinate Measurements	3
QET 224	ISO 9000/16949 Documentation	3
QET 270	Quality Control Internship	1
IET 240	Six Sigma I	4
INT 109	Fundamentals of Tooling & Manufacturing Processes	4
SRM 211	Industrial Safety I	3

Quality Engineering Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
QET 107	Engineering Disasters	1
ETD 128	Print Reading with GD&T	3
MAT 131	Technical Mathematics I	5
ENG 111	English Composition I	3
QET 100	Tooling & Machining Metrology	2
ETD 198	Personal Computer Applications for Engineering Technology	2
QET M30	Introduction to Materials & Manufacturing Processes	1
	TOTAL	17
SECOND QUARTER		
ETD 199	Introduction to Computer-Aided Drafting Concepts	2
ENG 112	English Composition II	3
MAT 132	Technical Mathematics II	5
QET 101	Survey of Total Quality	2
QET 171	Lab for QET 101	1
QET 113	Coordinate Measurement	3
QET 120	Process Metrology	3
	TOTAL	22
THIRD QUARTER		
ENG 113	English Composition III	3
QET 105	Packaging Concepts & Materials	3
ETD 101	Introduction to Engineering Design	3
QET 131	Fundamentals of Metallurgy & Material Science	3
QET 201	Statistical Process Control	2
QET 181	Lab for QET 201	1
INT 109	Fundamentals of Tool & Manufacturing Processes	4
	TOTAL	19
FOURTH QUARTER		
QET 202	Advanced Statistical Quality Control	3
QET 211	Design & Process Failure Modes & Effects Analyses	2
QET 223	ISO 9000/16949 Quality Systems	3
QET 182	Lab for QET 202	1
QET 126	Liquid Penetrant/ Magnetic Particle Testing	3
QET 221	Quality Assurance	3
	TOTAL	15
FIFTH QUARTER		
QET 217	Measurement & Calibration	2
QET 185	Lab for QET 217	1
QET 231	ISO 9000/16949 Internal Auditor	3
QET 212	Reliability Testing & Analysis	2
QET 124	Industrial Radiography	3
	or	
	125 Ultrasonic Testing	3
COM 206	Interpersonal Communication	3
	or	
	211 Effective Speaking I	3
	TOTAL	15
SIXTH QUARTER		
	General Education Elective	3
QET 295	Quality Engineering Technology Capstone	3
EGR 132	Connecting Technology & Our Lives	3
	or	
	Humanities Elective*	3
QET	QET Technical Elective	3
QET 133	Non-Metallic Materials & Processes	2
QET 174	Lab for QET 133	1
QET 123	Eddy Current Testing	2
	TOTAL	17

*See page 80.

Quality Engineering Technology

Quality Assurance Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
QET 107 Engineering Disasters	1
ETD 128 Print Reading with GD&T	3
ENG 111 English Composition I	3
MAT 131 Technical Mathematics I	5
ETD 198 Personal Computer Applications for Engineering Technology	2
QET M30 Introduction to Materials & Manufacturing Processes	1
QET 100 Tooling & Machining Metrology	2
TOTAL	17
SECOND QUARTER	
ENG 112 English Composition II	3
QET 101 Survey of Total Quality	2
QET 171 Lab for QET 101	1
QET 113 Coordinate Measurement	3
MAT 132 Technical Mathematics II	5
QET 120 Process Metrology	3
ETD 199 Introduction to Computer-Aided Drafting Concepts	2
TOTAL	19
THIRD QUARTER	
MAT 133 Technical Mathematics III	5
QET 105 Packaging Concepts & Materials	3
ETD 101 Introduction to Engineering Design	3
QET 201 Statistical Process Control	2
QET 181 Lab for QET 201	1
COM 206 Interpersonal Communication	3
211 Effective Speaking I	3
TOTAL	17
FOURTH QUARTER	
PHY 131 Technical Physics I	4
QET 202 Advanced Statistical Quality Control	3
QET 182 Lab for QET 202	1
QET 211 Design & Process Failure Modes & Effects Analyses	2
QET 221 Quality Assurance	3
IET 130 Lean Manufacturing	3
TOTAL	16
FIFTH QUARTER	
QET 132 Metallurgy	2-3
133 Non-Metallic Materials & Processes	
QET 173 Lab for QET 132	1
174 Lab for QET 133	
QET 261 Continuous Process Improvement	2
QET 223 ISO 9000/16949 Quality Systems	3
QET 185 Lab for QET 217	1
QET 184 Lab for QET 261	1
QET 217 Measurement & Calibration	2
QET 212 Reliability Testing & Analysis	2
PHY 133 Technical Physics III	4
TOTAL	18-19
SIXTH QUARTER	
IET 198 Computer Quantitative Analysis in Engineering Technology	2
PSY 229 Work Group Dynamics	
or	
PSY/SOC Elective	3
ENG 113 English Composition III	3
QET 295 Quality Engineering Technology Capstone	3
EGR 132 Connecting Technology & Our Lives	
or	
Humanities Elective*	3
QET _____ QET Technical Elective	3
TOTAL	17

*See page 80.

Career Program

Description

This option provides students an interdisciplinary approach to a variety of quality issues involving technical and service industries where quality in production and quality in customer service and satisfaction are important. This curriculum is modeled after the American Society for Quality Control requirements for the Certified Quality Engineering certification. The Quality Assurance Option of the Quality Engineering Technology program is the only TAC/ABET accredited QET associate degree in the United States.

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

104-105 Total Credit Hours

Transfer to Four Year

Graduates may continue their education at the baccalaureate level in areas of manufacturing engineering technology, industrial engineering technology, business and liberal arts and sciences.

Career Opportunities

Graduates of this program are recognized as professionals in the area of Quality Engineering Technology capable of assuming a variety of responsible positions within any organization.

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering & Technology (TAC-ABET), 111 Market Place Suite 1050, Baltimore, Maryland 21202, phone: (410) 347-7700.

Career Program

Description

This program incorporates a full range of safety engineering studies addressing construction and general industry safety, fire protection, industrial hygiene, waste management, industrial hygiene instrumentation and product design. The curriculum is based on the Board of Certified Safety Professionals (BCSP) and American Society of Safety Engineers (ASSE) recommendations and prepares students for the Certified Safety Professional (CSP) exam. Graduates are prepared to directly enter the work force as safety engineering technicians and work in the general and/or the construction occupational industries. The program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering & Technology (TAC-ABET).

Program Prerequisites:

First time college students are encouraged to take EN 101 or EGR 160.

Type of Degree or Certificate

Associate of Applied Science

104-108 Total Credit Hours

Transfer to Four Year

Graduates may continue their education and obtain a bachelor's degree in Safety Engineering.

Career Opportunities

This is an excellent career field for those looking for non-traditional roles in challenging hands-on occupations. Graduates can find employment opportunities in both private and public sectors. The largest employers of safety professionals are manufacturing, service industries, construction, insurance, consulting firms and the government.

Technical Electives

QET	231	ISO 9000/16949 Internal Auditor	3
EGR	115	Industrial Ergonomics	3
FST	116	Fire Protections Systems I	3
FST	201	Fire Hydraulics	5
FST	204	Water Suppression Systems	4
PHY	141	College Physics I	4
QET	101	Survey of Total Quality	2
SRM	153	Introduction to Transportation Safety	1
SRM	211	Applied Industrial Risk Management	3
SRM	222	Product Safety Management	3
SRM	230	Occupational Safety & Health	3
SRM	231	OSHA Construction Standards	4
SRM	232	Construction Worksite Safety	3
SRM	270	Safety Engineering Technology Internship	3

Safety Engineering Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours	
FIRST QUARTER			
SRM	101	Introduction to Safety Engineering Technology	3
ENG	111	English Composition I	3
MAT	116	College Algebra	5
CHE	151	General Chemistry I	5
EVT	110	Environmental Compliance	3
TOTAL			19
SECOND QUARTER			
SRM	212	Hazard Control Analytical Methods	4
ENG	112	English Composition II	3
MAT	117	Trigonometry	4
BIO	107	Human Biology	5
ETD	198	Personal Computer Applications for Engineering Technology	2
TOTAL			18
THIRD QUARTER			
SRM	221	Safety & Health Program Management	3
COM	211	Effective Speaking I	3
CHE	152	General Chemistry II	5
SRM	120	Safety Lab	2
FST	103	Fire Prevention Fundamentals, Codes, & Ordinances	4
TOTAL			17
FOURTH QUARTER			
SRM	151	OSHA 1910.120 Hazardous Waste Operations	5
SRM	215	Industrial Hygiene	3
PHY	141	College Physics I	4
—	—	Humanities Elective*	3
—	—	Technical Elective	3-4
TOTAL			18-19
FIFTH QUARTER			
MAT	122	Statistics I	4
EVT	200	Environmental Waste Management	4
EVT	260	Treatment, Storage, & Disposal of Hazardous Materials	3
EGR	206	Engineering Technology Economics	3
—	—	Technical Elective	3-5
TOTAL			17-19
SIXTH QUARTER			
SRM	278	SRM Capstone	3
SRM	219	Industrial Hygiene Instrumentation	3
PSY	121	General Psychology I	3
—	—	Technical Electives	6-7
TOTAL			15-16

*See page 80.

Airframe Aviation Maintenance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
AVT	136	Sheet Metal I	4
AVT	227	Fabric & Wood Structures	3
AVT	229	Aircraft Finishes	3
		TOTAL	10
SECOND QUARTER			
AVT	236	Sheet Metal II	4
AVT	121	Assembly & Rigging	5
AVT	108	Ice & Rain/Fire Protection	2
		TOTAL	11
THIRD QUARTER			
AVT	132	Electrical Systems I	4
AVT	214	Cabin Atmosphere Control Systems	3
AVT	133	Instrument Systems	2
AVT	134	Communication/Navigation Systems	2
AVT	107	Fuel Systems	3
		TOTAL	14
FOURTH QUARTER			
AVT	232	Electrical Systems II	4
AVT	218	Landing Gear	4
AVT	106	Position & Warning Systems	2
		TOTAL	10
FIFTH QUARTER			
AVT	137	Aircraft Structural Welding	4
AVT	217	Hydraulics & Pneumatics Systems	3
AVT	237	Airframe Inspections	2
		TOTAL	9

Certificate

Description

The Airframe Aviation Maintenance certificate will prepare students in the Federal Aviation Administration knowledge and hours required for the Airframe license. The subjects covered are welding, sheet metal, fabric and wood structures, finishes, assembly and rigging, airframe electrical, cabin atmosphere control systems, instruments, communication, navigation, hydraulics, pneumatics, landing gear systems, position and warning, fuel systems, ice and rain, fire protection, and airframe inspections.

Type of Degree or Certificate

Certificate

54 Total Credit Hours

EGR

Certificate

Description

The Airline Flight Attendant certificate provides students with the basic theory of airline travel with an understanding of the policies, procedures, and means of compliance with the Federal Aviation Regulations. Students explore the business of air commerce and develop the skills of a travel professional necessary for a flight attendant. Includes exploration of aviation meteorology, communication, safety and security, air travel, customer service, first aid and first responder, and crew resource management.

Type of Degree or Certificate

Certificate

49 Total Credit Hours

Career Opportunities

This program develops the knowledge and skills required to serve as a flight attendant and enter a career in the aviation industry.

Airline Flight Attendant

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title

FIRST QUARTER

			Credit Hours
AVT	146	Introduction to Airline Operations	4
AVT	246	Air Traffic Control Communications	3
AVT	150	Crew Resource Management	2
TNT	100	Introduction to Travel & Tourism	3
TNT	112	Domestic Air Travel	3
PED	105	Physical Fitness	<u>1</u>
TOTAL			16

SECOND QUARTER

AVT	119	Aviation Meteorology	3
AVT	152	Flight Attendant Security	4
BIS	201	Customer Service	3
COM	206	Interpersonal Communication	3
PED	200	First Aid & Safety	2
TNT	114	International Travel	<u>3</u>
TOTAL			18

THIRD QUARTER

AVT	147	Pre-Solo Flight Lab	3
AVT	149	Special Material Handling	1
AVT	151	Crew Survival & Rescue Techniques	2
AVT	270	Aviation Internship	3
EMS	105	First Responder	3
TNT	122	Airline Computer I	<u>3</u>
TOTAL			15

Automotive Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
AUT	165	Automotive Brake System	5
AUT	142	Manual Transmissions & Drive Line	5
		TOTAL	10
SECOND QUARTER			
AUT	125	Electrical/Electronic Systems II	7
AUT	210	Steering, Suspension & Alignment	5
AUT	108	Engine Systems	5
		TOTAL	17
THIRD QUARTER			
AUT	115	Engine Performance I	7
AUT	146	Automotive Heating & Air Conditioning	5
ETD	198	Personal Computer Applications for Engineering Technology	2
		TOTAL	14
FOURTH QUARTER			
AUT	245	Engine Performance II	7
AUT	241	Automatic Transmissions	7
		TOTAL	14

Certificate

Description

This program is designed for students who want to become automotive technicians without pursuing an associate degree. It will allow students to expand their knowledge of the automotive industry and secure employment with dealerships, independent services facilities, machine shops, and corporate services franchises.

Program Prerequisite:

AUT 124 Electrical/Electronic Systems I

Type of Degree or Certificate

Certificate

55 Total Credit Hours

Certificate

Description

A nine-month intensive training program offered by Sinclair Community College in cooperation with the Dayton Tooling & Machining Association, Inc. To enroll for the three quarters of training beginning in September and finishing in June, students must formally apply for admittance to the program through the Engineering & Industrial Technologies division. Students who are accepted into the program will receive 25-30 hours of classroom and laboratory instruction per week as well as producing for personal use tools valued at approximately \$1,500. Classes are available evenings as well as weekends accommodate students who are unable to attend during the day.

Type of Degree or Certificate

Certificate

53-54 Total Credit Hours

Career Opportunities

The Tooling & Machining certificate completion prepares graduates for employment in the tool & die industry as well as career advancement.

Computer Aided Manufacturing Project Step II

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ETD	128	Print Reading with GD&T	3
INT	109	Fundamentals of Tool & Manufacturing Processes	4
INT	141	Applied Shop Mathematics I	3
INT	161	Machine Operations Laboratory I	8
QET	100	Tooling & Machining Metrology	<u>2</u>
TOTAL			20
SECOND QUARTER			
INT	113	Fundamentals of CNC	3
INT	142	Applied Shop Mathematics II	3
INT	162	Machine Operations Laboratory II	8
ETD	230	Introduction to Geometric Dimensioning & Tolerancing	<u>3</u>
TOTAL			17
THIRD QUARTER			
INT	143	Applied Shop Mathematics III	3
INT	163	Machine Operations Laboratory III	8
		INT Elective	3-4
ETD	199	Introduction to Computer-Aided Drafting Concepts	<u>2</u>
TOTAL			16-17

Computer Aided Manufacturing

Tool & Die Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ETD	128	Print Reading with GD&T	3
IET	125	Introduction to World-Class Manufacturing	3
INT	111	Tool & Manufacturing Processes I	3
INT	141	Applied Shop Mathematics I	3
QET	100	Tooling & Machining Metrology	2
ETD	198	Personal Computer Applications for Engineering Technology	2
TOTAL			16
SECOND QUARTER			
EER	115	Essentials of Electricity	3
INT	112	Tool & Manufacturing Processes II	3
INT	142	Applied Shop Mathematics II	3
INT	151	Principles of Welding	3
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
INT	145	Shop Floor Programming	3
TOTAL			17
THIRD QUARTER			
INT	113	Fundamentals of CNC	3
INT	114	Jig & Fixture Design	3
INT	165	Advanced Machine Operations Laboratory	4
INT	143	Applied Shop Mathematics III	3
INT	225	Tool Design	3
ETD	280	Advanced Computer Aided Drafting	3
TOTAL			19

Certificate

Description

This program is designed to enhance the skills of students who are pursuing a career in the tool and die industry. Courses in this three quarter program include mechanical drafting, industrial metrics conversion, tool and manufacturing processes, electrical and electronic workshop, principles of welding, metrology, jig and fixture design, and tool design. Students wishing to pursue an associate degree may be able to transfer many of the courses toward a degree in the Engineering & Industrial Technologies division.

Type of Degree or Certificate

Certificate

52 Total Credit Hours

Certificate

Description

This program provides courses which address fire administration, fire protection, building construction and hazardous materials.

Type of Degree or Certificate

Certificate

54 Total Credit Hours

Career Opportunities

The certificate program prepares students for careers in fire protection, inspection, investigation and administration.

Fire Administration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours	
FIRST QUARTER			
FST	193	Firefighter II Transition	8
FST	251	Fire Officer Level I	8
ETD	198	Personal Computer Applications for Engineering Technology	<u>2</u>
TOTAL			18
SECOND QUARTER			
FST	252	Fire Officer Level II	4
ENG	121	Technical Composition I	3
COM	211	Effective Speaking I	3
ACC	121	Principles of Financial Accounting	5
FST	___	Fire Science Technology Elective	<u>5</u>
TOTAL			20
THIRD QUARTER			
FST	253	Fire Officer Level III	4
ENG	122	Technical Composition II	3
FST	___	Fire Science Technology Elective	<u>9</u>
TOTAL			16
Technical Electives			
Choose 14 credit hours from the following:			
FST	102	Fire Protection Organization	4
FST	115	Fire Apparatus & Equipment	3
FST	116	Protective Systems I	3
FST	120	Fire Safety Inspector	6
FST	125	Fire Investigation Procedures	4
FST	201	Fire Hydraulics	5
FST	202	Building Construction	4
FST	204	Water Suppression Systems I	4
FST	208	Incident Command System II	4
FST	209	Fire Safety Instructor	3
SRM	151	Hazardous Waste Operations	5

Fire Science Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
FST	101	Introduction to Fire Science	4
SRM	230	Occupational Safety & Health	3
MAT	131	Technical Mathematics I	5
ENG	111	English Composition I	3
TOTAL			15
SECOND QUARTER			
FST	103	Fire Prevention Fundamentals, Codes, & Ordinances	4
FST	116	Fire Protections Systems I	3
FST	201	Fire Hydraulics	5
ETD	128	Print Reading with GD&T	3
MAT	117	Trigonometry	4
TOTAL			19
THIRD QUARTER			
FST	204	Water Suppression Systems	4
FST	218	Plans Review for Fire Safety	3
FST	220	Fire Protection Systems Design	4
SRM	151	OSHA 1910.120 Hazardous Waste Operations	5
FST	—	Fire Science Technology Elective	3
TOTAL			19

Certificate

Description

This program provides courses which address fire protection and safety issues.

Type of Degree or Certificate

Certificate

53 Total Credit Hours

Career Opportunities

The certificate program prepares students for careers in fire protection systems, fire prevention, and occupational safety and health.

Technology Electives

FST	102	Fire Protection Organization
FST	115	Fire Apparatus & Equipment
FST	194	Fire Brigade Training
FST	202	Building Construction
FST	206	Incident Command System I
FST	208	Incident Command System II

EGR

Certificate

Description

The General Aviation Maintenance certificate provides the Federal Aviation Administration knowledge and skill required for the general knowledge area required for FAA certification as an airframe and powerplant maintenance technician. Students will learn to apply mathematics and physics principles to practical aircraft maintenance problems, read and interpret aircraft drawings, conduct aircraft ground operations and servicing, interpret maintenance publications, understand maintenance technician responsibilities, understand FAA regulations, and perform weight and balance calculations.

Type of Degree or Certificate

Certificate

46 Total Credit Hours

General Aviation Maintenance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
AVT	105	Orientation to Aviation*	3
AVT	112	Performance Calculations	2
AVT	113	Drawings for Aviation Maintenance	4
AVT	114	Fluids & Gasses	2
AVT	115	Ground Operations & Servicing	<u>3</u>
TOTAL			14
SECOND QUARTER			
AVT	116	Regulations & Documentation	4
AVT	117	Fluid Lines & Fittings	3
AVT	213	Corrosion Control	4
AVT	110	Ground School/Private Pilot*	<u>4</u>
TOTAL			15
THIRD QUARTER			
AVT	131	Electrical Aviation Maintenance	5
AVT	118	Weight & Balance	4
AVT	135	Materials & Processes	6
AVT	238	Aircraft Avionics*	<u>3</u>
TOTAL			18

*AVT 105, 110 and 238 are not required for the A & P certification by FAA.

Plastics & Composites Engineering Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
PLA	106	Introduction to Plastics Technology	4
MAT	131	Technical Mathematics I	5
IET	101	Work Methods Analysis & Improvement	3
ETD	128	Print Reading with GD&T	3
QET	101	Survey of Total Quality	2
			17
SECOND QUARTER			
PLA	150	Plastics Processing Equipment Fundamentals	4
PLA	208	Plastics Materials Processing I	4
ENG	121	Technical Composition I	3
IET	198	Computer Programming Applications in Engineering Technology	2
CHE	131	Technical Chemistry I	4
			17
THIRD QUARTER			
PLA	220	Extrusion (Process II)	4
		or	
	225	Injection Molding (Process II)	
PLA	210	Plastics Materials Testing	4
ETD	198	Introduction to Computer-Aided Drafting Concepts	2
IET	205	Manufacturing Processes	3
QET	201	Statistical Process Control	2
			15

Certificate

Description

With the ever-increasing uses of plastics and composites, there exists a need for technicians who understand the unique properties and manufacturing procedures associated with non-metallic materials. From sporting equipment, bicycles, skis, boating equipment, to aircraft, automobiles, and even spacecraft, there is a growing emphasis being placed on lightweight and strong materials. In a word: plastics. The program has been designed to emphasize practical applications and manufacture of plastics rather than stressing polymer chemistry. Students will learn on the state-of-the-art plastics and composite machinery.

Type of Degree or Certificate

Certificate

49 Total Credit Hours

Career Opportunities

Career opportunities include: injection molding technician, mold design technician, composite manufacturing technician, manufacturing technologist, material technologist, methods specialist, industrial engineering technician, shop foreman, and plastics processing technician.

Certificate

Description

The Powerplant Aviation Maintenance certificate will prepare students with the knowledge and hours required for the Federal Aviation Administration's Powerplant license. The subjects covered include reciprocating and turbine engine operation theory, lubrication, powerplant electricity, ignition, starting, fire protection, auxiliary power units, engine instruments, induction, exhaust, cooling, fuel systems and fuel metering, propeller operation and overhaul, and powerplant inspection.

Type of Degree or Certificate

Certificate

53 Total Credit Hours

Powerplant Aviation Maintenance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
AVT 126	Reciprocating Engines I	5
AVT 128	Instruments & Fire Protection	3
AVT 139	Induction/Exhaust/Cooling	<u>4</u>
	TOTAL	12
SECOND QUARTER		
AVT 226	Reciprocating Engines II	5
AVT 231	Engine Electrical	<u>4</u>
	TOTAL	9
THIRD QUARTER		
AVT 234	Reciprocating Engines III	3
AVT 122	Engine Ignition & Starting I	4
AVT 239	Powerplant Inspections	<u>2</u>
	TOTAL	9
FOURTH QUARTER		
AVT 222	Engine Ignition & Starting II	4
AVT 219	Turbine Engines	4
AVT 129	Propellers	<u>5</u>
	TOTAL	13
FIFTH QUARTER		
AVT 127	Lubrication	5
AVT 138	Engine Fuel & Fuel Metering	<u>5</u>
	TOTAL	10

Quality Control Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
QET	100	Tooling & Machining Metrology	2
QET	107	Engineering Disasters	1
MAT	131	Technical Mathematics I	5
ETD	128	Print Reading with GD&T	3
QET	126	Liquid Penetrant/ Magnetic Particle Testing	3
QET	M30	Introduction to Materials & Manufacturing Processes	1
ETD	198	Personal Computer Applications for Engineering Technology	2
TOTAL			17
SECOND QUARTER			
INT	109	Fundamentals of Tool & Manufacturing Processes	4
QET	101	Survey of Total Quality	2
QET	173	Lab for QET 132	1
QET	120	Process Metrology	3
QET	113	Coordinate Measurement	3
QET	223	ISO 9000/16949 Quality Systems	3
QET	124	Industrial Radiography	3
		or	
	125	Ultrasonic Testing	3
TOTAL			19
THIRD QUARTER			
QET	105	Packaging Concepts & Materials	3
QET	201	Statistical Process Control	2
QET	181	Lab for QET 201	1
QET	123	Eddy Current Testing	2
ENG	111	English Composition I	3
COM	206	Interpersonal Communication	3
		or	
	211	Effective Speaking I	3
QET	131	Fundamentals of Metallurgy & Material Science	3
		or	
	133	Non-Metallic Materials & Processes	3
		and	
	174	Lab for QET 133	3
TOTAL			17

Certificate

Description

Students are prepared to apply the mathematics and basic laws of physics to the non-destructive testing and quality inspection of mechanical and electronic systems.

Type of Degree or Certificate

Certificate

53 Total Credit Hours

Career Opportunities

It is geared both to students who desire an entry level position in the area of mechanical inspection or to skilled workers desiring upgrade training.

Certificate

Description

This certificate addresses industry safety, occupational safety and health, hazard control and analysis, and industrial hygiene.

Type of Degree or Certificate

Certificate

54 Total Credit Hours

Career Opportunities

The certificate prepares students for careers in safety management and industrial hygiene. The courses in this certificate can be applied to the Safety Engineering Technology Associate Degree program.

Safety Engineering Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
SRM	101	Introduction to Safety Engineering Technology	3
EVT	110	Environmental Compliance	3
MAT	116	College Algebra	5
ENG	111	English Composition I	3
BIO	107	Human Biology	5
TOTAL			19
SECOND QUARTER			
SRM	212	Hazard Control Analytical Methods	4
MAT	117	Trigonometry	4
ENG	112	English Composition II	3
CHE	151	General Chemistry I	5
TOTAL			16
THIRD QUARTER			
SRM	120	Safety Lab	2
SRM	221	Safety & Health Program Management	3
SRM	219	Industrial Hygiene Instrumentation	3
MAT	122	Statistics I	4
PHY	141	College Physics I	4
TOTAL			16
FOURTH QUARTER			
SRM	215	Industrial Hygiene	3
TOTAL			3

Surveying

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ARC	138	Architectural Blueprint Reading	3
CCT	102	Basic Construction Surveying	4
COM	206	Interpersonal Communication	3
ETD	198	Personal Computer Applications for Engineering Technology	2
TOTAL			12
SECOND QUARTER			
CCT	103	Civil Construction Blueprints & Drafting	3
CCT	105	Properties of Construction Materials	3
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
MAT	131	Technical Mathematics I	5
TOTAL			13
THIRD QUARTER			
CCT	246	Topographic Drawing & Mapping	4
MAT	132	Technical Mathematics II	5
—		General Education Elective*	3
TOTAL			12
FOURTH QUARTER			
CCT	235	Legal Principles for Surveyors	4
CCT	247	Highway Surveying & Design	3
SRM	231	OSHA Construction Standards	4
—		Technical Elective	3
TOTAL			14

*See page 80.

Certificate

Description

This four-quarter certificate concentrates on developing the skills needed to become employed as technicians for surveying or civil engineering firms.

Type of Degree or Certificate

Certificate

51 Total Credit Hours

Career Opportunities

Individuals with skills in the use of surveying equipment and surveying software programs are always in demand to work with surveying professionals.

Short Term

Description

The Aircraft Dispatcher certificate provides students with the theory and operating knowledge of aircraft dispatching necessary for understanding the policies, procedures, and means of compliance with the applicable Federal Aviation Regulations leading to certification. To that end, students explore aircraft performance, flight physiology, meteorology, crew resource management, air traffic control, instrument flight rules navigation, airline operations, and written and oral test preparation.

Type of Degree or Certificate

Short Term Certificate

29 Total Credit Hours

Career Opportunities

The program develops the knowledge and skills required to serve as an aircraft dispatcher and enter a career in the aviation industry.

Aircraft Dispatcher

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title

FIRST QUARTER

			Credit Hours
AVT	119	Aviation Meteorology	3
AVT	146	Introduction to Airline Operations	4
AVT	150	Crew Resource Management	2
AVT	246	Air Traffic Control Communications	3
AVT	167	IFR Navigation & Planning	3
AVT	165	Flight Physiology	1
		TOTAL	16

SECOND QUARTER

AVT	161	Beechcraft 1900 Aircraft Performance	2
AVT	162	DC-9 Aircraft Performance	2
AVT	163	Boeing 727 Aircraft Performance	2
AVT	164	Boeing 737 Aircraft Performance	2
AVT	166	Practical Dispatch Applications	3
AVT	168	Aircraft Dispatcher Oral Preparation	2
		TOTAL	13

Automotive High Performance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
AUT 221	High Performance Engine Blocks & Rotating Assemblies	7
TOTAL		7
SECOND QUARTER		
AUT 222	High Performance Cylinder Heads & Valve Train	7
TOTAL		7
THIRD QUARTER		
AUT 2 223	High Performance Engine Assembly & Dynamometer Testing	7
TOTAL		7
FOURTH QUARTER		
AUT 224	High Performance Induction Systems	7
TOTAL		7

Computer Aided Manufacturing Top Gun Machining Academy

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
QET 117	Advanced Quality & Inspection	3
ETD 231	Advanced Design Interpretation	3
INT 226	Advanced Job Processing	3
INT 227	Advanced CNC Mill Programming	3
	or	
228	Advanced CNC Milling	3
TOTAL		12

Short Term

Description

This program provides in-depth, hands-on experience in various areas of high performance engines; an ideal choice to supplement degree seeking students wishing to specialize in the engine area. Also designed to prepare students for the ASE (Automotive Service Excellence) engine machinist series. Courses are dedicated to specific areas of engine development. Engine blocks, cylinder head and valve train, assembly and dynamometer testing as well as fuel systems for performance engines are covered.

Students apply learned knowledge toward the building of their own high performance engine and fuel delivery system.

Program Prerequisites:

AUT 108 Engine Systems
or
AUT 115 Engine Performance I
or
chairperson's signature

Type of Degree or Certificate

Short Term Certificate

28 Total Credit Hours

Career Opportunities

Students completing the certificate may be employed in a high performance engine shop, general engine machine shop, or work on a race team.

Short Term

Description

The Top Gun Machining Academy is an advanced level, critical thinking program designed to elevate good technicians into top performers. The certificate consists of three foundation courses, Advanced Design Interpretation, Advanced Job Processing, and Advanced Quality followed by specialized courses in Tooling & Machining such as Advanced CNC Milling and Advanced CNC Mill Programming. Students are expected to have substantial industrial experience prior to entering this certificate program.

Type of Degree or Certificate

Short Term Certificate

12 Total Credit Hours

EGR

Short Term

Description

Designed for people in the construction industry, this program addresses effective management, implementation of work place safety, and health programs for individuals in the construction industry. It also includes benefits of a well managed safety program, an understanding of hazardous materials, ergonomics, OSHA standards, recordkeeping, industrial hygiene, confined space and other related safety fields.

Recommended Prerequisites:

ENG	121	Technical Communications I or equivalent
SRM	130	Trainer Course for Occupational Safety & Health for the Construction Industry
EVT	110	Environmental Compliance
EVT	200	Environmental Waste Management
CHE	131	Technical Chemistry I

Type of Degree or Certificate

Short Term Certificate

33 Total Credit Hours

Career Opportunities

Upon completion of this program, individuals will be qualified to move into safety management positions in the construction industry.

Construction Safety

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title

FIRST QUARTER

			Credit Hours
SRM	130	Trainer Course for Occupational Safety & Health for the Construction Industry	3
EGR	115	Industrial Ergonomics	3
EVT	217	Confined Space Management	2
SRM	144	Fall Arrest Systems	3
SRM	146	OSHA Recordkeeping	1
SRM	231	OSHA Construction Standards	4
		TOTAL	16

SECOND QUARTER

SRM	232	Construction Work Site Safety	3
SRM	132	OSHA Construction Trainer Update	2
SRM	139	Respiratory Protection	3
EVT	260	Treatment, Storage, & Disposal of Hazardous Materials	3
EER	142	Safety in Electric Distribution	3
SRM	215	Industrial Hygiene	3
		TOTAL	17

Construction Supervisor

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ARC	138	Architectural Blueprint Reading	3
ARC	139	Mechanical Systems Blueprint Reading	2
CCT	105	Properties of Construction Materials	3
COM	206	Interpersonal Communication	3
ETD	198	Personal Computer Applications for Engineering Technology	2
TOTAL			13
SECOND QUARTER			
ARC	107	Architectural Building Codes	3
CCT	216	Construction Estimating	4
CCT	240	Construction Law & Specifications	3
CCT	256	Construction Management	3
QET	101	Survey of Total Quality	3
TOTAL			16
THIRD QUARTER			
CCT	102	Basic Construction Surveying	4
CCT	242	Construction Management Personnel Issues	3
CCT	258	Project Management Techniques	3
SRM	231	OSHA Construction Standards	4
TOTAL			14

Construction Technician

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ALH	144	American Heart Association Heartsaver FACTS	1
ARC	138	Architectural Blueprint Reading	3
CCT	120	Introduction to Construction Trades	3
CCT	141	Portland Cement Concrete Level I	4
SRM	154	Introduction to OSHA Construction Standards	1
TOTAL			12
SECOND QUARTER			
CCT	152	Light Frame Structural Systems I	4
CCT	153	Light Frame Structural Systems	4
EER	181	Electrical Construction I	4
TOTAL			12
THIRD QUARTER			
CCT	154	Commercial Interiors	4
CCT	270	Civil Engineering Technology Internship	3
		Civil Engineering Elective	3
SRM	231	OSHA Construction Standards	3
TOTAL			13

Short Term

Description

This program is designed for experienced crafts people of the construction industry to improve their supervisory and leadership skills. Students will receive training to help them understand the building construction industry from a management perspective including an understanding of building Materials & components, the financial aspects of building construction, and the management skills necessary to deal with the diverse population of the industry. Heavy emphasis will be placed on safety requirements.

Type of Degree or Certificate

Short Term Certificate

43 Total Credit Hours

Career Opportunities

Upon completing this program, crafts people will be qualified to move into management positions in the construction industry.

EGR

Short Term

Description

The purpose of this certificate is to develop knowledgeable construction workers with basic skills in a variety of disciplines. With a combination of classroom education, practical lab exercises, and co-op internships, students will exit this certificate program with a solid introduction into carpentry, concrete finishing, and electrical.

Type of Degree or Certificate

Short Term Certificate

37 Total Credit Hours

Career Opportunities

This program is designed to make students employable as an entry level drafts person in construction. The demand for these jobs is exploding as the older work force is retiring and the next generation is needed.

Short Term

Description

This certificate promotes (1) technical communication skills and teamwork, (2) project management skills, (3) lean manufacturing and continuous improvement skills, (4) application of quality principles, statistics and probability theories, and (5) problem solving skills as they relate to process improvement. This program reflects the underlying skills necessary for the successful application of "six sigma" methodologies. A typical title for an employee with these skills is a process improvement specialist. A recent web search verified nearly 4,000 position openings at a national employment service with the key words "process improvement." This short-term certificate provides practice in measuring and improving processes that suffer from quality, throughput, and waste problems. The courses in this short-term certificate apply directly to the Quality Engineering Technology Degree.

Type of Degree or Certificate

Short Term Certificate

41-42 Total Credit Hours

Continuous Process Improvement

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
QET	M30	Introduction to Materials & Manufacturing Processes	1
ETD	198	Personal Computer Applications for Engineering Technology	2
MAT	101	Elementary Algebra	<u>4</u>
TOTAL			7
SECOND QUARTER			
QET	101	Survey of Total Quality	2
QET	171	Lab for QET 101	1
MAT	131	Technical Mathematics I	<u>5</u>
TOTAL			8
THIRD QUARTER			
ENG	111	English Composition I	3
QET	201	Statistical Process Control	2
QET	181	Lab for QET 201	1
IET	130	Lean Manufacturing	<u>3</u>
TOTAL			9
FOURTH QUARTER			
QET	221	Quality Assurance	3
QET	183	Lab for QET 221	1
QET	202	Advanced Statistical Quality Control	3
QET	182	Lab for QET 202	<u>1</u>
TOTAL			8
FIFTH QUARTER			
QET	261	Continuous Process Improvement	2
QET	184	Lab for QET 261	1
ENG	112	English Composition II	<u>3</u>
TOTAL			6
SIXTH QUARTER			
QET	295	Quality Control Seminar	3-4
IET	240	or Six Sigma I	
TOTAL			<u>3-4</u>

Digital Systems

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
EET	114	Basic Electronic Measurements	3
			3
SECOND QUARTER			
EET	231	Digital Logic & Circuits	4
			4
THIRD QUARTER			
EET	251	Digital Systems I	4
EET	252	Digital Systems II	4
			8

Drafting & Design

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
COM	206	Interpersonal Communication	3
ETD	128	Print Reading with GD&T	3
ETD	198	Personal Computer Applications for Engineering Technology	2
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
			10
SECOND QUARTER			
ENG	111	English Composition I	3
ETD	230	Introduction to Geometric Design & Tolerancing	3
ETD	280	Advanced Computer Aided Drafting	3
			9
THIRD QUARTER			
ETD	284	Solidworks Basics	5
ETD	291	Unigraphics Basics	5
MAT	131	Technical Mathematics I	5
			15

Short Term

Description

This short term certificate offers knowledge and basic skills to work in electronics industry as entry level support technicians for digital systems. Courses provide knowledge about basic electrical measurement techniques, prototype assembly of electrical circuits, digital logic, Boolean algebra, and basic digital systems. Theoretical aspects are supported and supplemented by hands-on lab work to gain an in-depth knowledge and lab skills. The courses in this certificate lead into an associate degree in Electronics Engineering Technology at Sinclair. Students entering this program need the following background to be successful: (1) Completion of senior level high school algebra; (2) basic computer literacy; (3) Sinclair placement test results beyond DEV 064, Fundamentals of Reading, and MAT101, Elementary Algebra; and (4) at least a 2.0 cumulative grade point average (ongoing students taking the online courses).

Program Prerequisites:

DEV 108 Introduction to Algebra
or
approval of division counselor
or
equivalent

Type of Degree or Certificate

Short Term Certificate

15 Total Credit Hours

Short Term

Description

Introduction to the industrial design process and computer aided drafting and design. The latest version of AutoCAD, Solidworks, and Unigraphics software is used in training students.

Type of Degree or Certificate

Short Term Certificate

34 Total Credit Hours

Short Term

Description

This short term certificate will fulfill the need of electrical construction industry for educated and trained electricians in the Dayton and Cincinnati area. There are four courses with variable credit to include retraining of currently employed electricians in the area.

Type of Degree or Certificate

Short Term Certificate

12-32 Total Credit Hours

Electrical Construction

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
EER	181	Electrical Construction I	3-8
EER	182	Electrical Construction II	3-8
EER	183	Electrical Construction III	3-8
EER	184	Electrical Construction IV	<u>3-8</u>
TOTAL			12-32

EGR

Short Term

Description

Facilities management is the practice of coordinating elements within the work environment so that people and equipment can perform their intended work functions. It involves principles of engineering, management, and financing. This program includes real estate acquisition, interior space planning, exterior and interior building repairs and renovations, telecommunication installations, personnel evaluations and building security. A facility manager must have a broad based education in technical, business, and supervisory related courses.

Type of Degree or Certificate

Short Term Certificate

44 Total Credit Hours

Career Opportunities

Possible employers include schools, hospitals, manufacturing plants, and government offices.

Facilities Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
COM	206	Interpersonal Communication	3
FST	116	Fire Protections Systems I	3
ETD	198	Personal Computer Applications for Engineering Technology	2
MAN	205	Principles of Management	3
	—	Facilities Management Program Elective	<u>3</u>
TOTAL			14
SECOND QUARTER			
IET	206	Value Engineering	3
MAN	210	Introduction to Project Management	3
HVA	144	Introduction to HVAC Systems	3
RES	221	Property Management	3
	—	Facilities Management Program Elective	<u>3</u>
TOTAL			15
THIRD QUARTER			
ARC	107	Architectural Building Codes	3
LEP	107	Security Administration	3
MAN	225	Human Relations & Organizational Behavior	3
SRM	221	Safety & Health Program Management	3
	—	Facilities Management Program Elective	<u>3</u>
TOTAL			15

Firefighter Technician

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
FST	180	Firefighter II	16
			16
SECOND QUARTER			
FST	120	Fire Safety Inspector	6
FST	206	Incident Command System	4
SRM	151	OSHA 1910.120 Hazardous Waste Operations	5
			15

Optional courses in place of FST 180:

FST 181 and FST 193 or FST 191, FST 192, and FST 193

Short Term

Description

Training for full-time, part-time and volunteer firefighters and fire safety inspectors to apply skills needed for public fire protection. Apply emergency management skills needed for common incidents and develop expertise to handle hazardous materials. Understand the importance of teamwork and coordination. Apply fire suppression skills.

Program Prerequisites:

Approval of chairperson

Type of Degree or Certificate

Short Term Certificate

31 Total Credit Hours

EGR

Ford Maintenance & Light Repair

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
AUT	125	Electrical/Electronic Systems II	7
AUT	210	Steering, Suspension & Alignment	5
AUT	165	Automotive Brake System	5
AUT	146	Automotive Heating & Air Conditioning	5
			22

Short Term

Description

This short term technical certificate prepares service technicians to work in Ford dealerships. Students will be trained to service Ford vehicles in the areas of brakes, steering/suspension, air conditioning and electrical/electronic systems. Apprenticeships at Ford dealerships are not required to participate in this program but job opportunities are available for those that would like to work full or part time. Graduates receive "Ford Service Technician Specialty Training" credentials from Ford Motor Corporation. Students desiring to continue their education can do so by completing the requirements for the associate degree in comprehensive automotive technology program.

Program Prerequisites:

Approval of chairperson

Type of Degree or Certificate

Short Term Certificate

22 Total Credit Hours

Short Term

Description

Designed for the general industry trades, this program focuses on effective management and implementation of work place safety and health programs. It includes an understanding of the benefits of a well managed safety program as well as an understanding of hazardous materials, ergonomics, OSHA standards, recordkeeping, industrial hygiene, confined space and other safety related fields.

Recommended Prerequisites:

ENG 121 Technical Communications I or equivalent
 EVT 110 Environmental Compliance
 EVT 200 Environmental Waste Management
 CHE 131 Technical Chemistry I

Type of Degree or Certificate

Short Term Certificate

36 Total Credit Hours

Career Opportunities

Upon completion of this program, individuals will be qualified to move into safety management positions in the general industry trades.

General Industry Safety

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title

FIRST QUARTER

Course & Title		Credit Hours
SRM 131	Trainer Course for Occupational Safety & Health for the General Industry	3
EGR 115	Industrial Ergonomics	3
EVT 217	Confined Space Management	2
SRM 144	Fall Arrest Systems	3
SRM 146	OSHA Recordkeeping	1
SRM 211	Applied Industrial Risk Management	3
SRM 138	Machine & Machine Guarding Standards	3
TOTAL		18

THIRD QUARTER

SRM 230	Occupational Safety & Health	4
SRM 133	OSHA General Industry Trainer Update	2
SRM 139	Respiratory Protection	3
EVT 260	Treatment, Storage, & Disposal of Hazardous Materials	3
EER 142	Safety in Electric Distribution	3
SRM 215	Industrial Hygiene	3
TOTAL		18

Short Term

Description

This certificate provides the knowledge and skills required for the design, installation, operation and maintenance of automated sprinkler, fire detection, alarm and suppression systems. It also provides instruction and hands-on experience in extinguishing fires in their incipient stage, functioning as a member of an industrial fire brigade and working in a hazardous waste site. This certificate includes the issuance of an OSHA 30-hour card for General Industry Safety and a 40-hour card for Hazardous Waste Operations.

Type of Degree or Certificate

Short Term Certificate

18 Total Credit Hours

Industrial Fire Protection Technician

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title

FIRST QUARTER

Course & Title		Credit Hours
FST 116	Fire Protections Systems I	3
FST 194	Fire Brigade Training	3
FST 204	Water Suppression Systems	4
SRM 151	OSHA 1910.120 Hazardous Waste Operations	5
SRM 230	Occupational Safety & Health	3
TOTAL		18

Industrial Maintenance Technician

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
EGR	160	Succeeding in Engineering Technology	2
EGR	164	Survey of Engineering Technology	1
INT	141	Applied Shop Mathematics I	3
EET	119	Basic Electrical Circuits & Controls	4
EGR	100	Fundamental Mechanical Skills	3
INT	109	Fundamentals of Tool & Manufacturing Processes	4
			17
SECOND QUARTER			
INT	142	Applied Shop Mathematics II	3
EER	139	Electrical Machinery	3
EER	166	Industrial Machine Wiring & Standards	3
EET	281	Programmable Logic Controllers	3
			12
THIRD QUARTER			
EGR	217	Fluid Power & Control	4
EGR	244	Automation & Control Devices	3
EGR	255	Industrial Networking	3
			10

Industrial Robot Technician

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
EGR	160	Succeeding in Engineering Technology	2
INT	141	Applied Shop Mathematics I	3
EER	126	D.C. Circuits	4
EGR	100	Fundamental Mechanical Skills	3
EGR	128	Robotics in CIM Systems	4
			16
SECOND QUARTER			
INT	142	Applied Shop Mathematics II	3
EER	127	A.C. Circuits	4
EGR	252	Teach Pendant Robot Programming	3
EGR	250	Robot Mechanical Unit Repair	3
			13
THIRD QUARTER			
EGR	217	Fluid Power & Control	4
EGR	251	Robot Controller Diagnostics	3
EGR	257	Handling Tool/TPP Programming	3
			10

Short Term

Description

The Industrial Maintenance Technician certificate provides the knowledge and skill required for installing, maintaining, and troubleshooting modern industrial machinery. Students will learn to solve practical maintenance problems, read and interpret mechanical drawings, and interpret maintenance publications.

Type of Degree or Certificate

Short Term Certificate

40 Total Credit Hours

EGR

Short Term

Description

The Industrial Robot Technician certificate provides the knowledge and skill required to meet the needs of industries incorporating robotic equipment within their production facilities.

Type of Degree or Certificate

Short Term Certificate

39 Total Credit Hours

Career Opportunities

This certificate program will provide the education necessary to operate and program industrial robots, diagnose system faults, and perform maintenance necessary to return faulty equipment to service.

Short Term

Description

This program is intended for entry level students or residential service technicians desiring careers as light commercial HVAC service technicians. This program is a hands-on troubleshooting and service program geared to the light commercial HVAC industry including convenience stores, restaurants, strip malls, and any other type of small business concern. Students learn the basics of heating, cooling, distribution and control of these systems. The hands-on component uses the types of equipment actually installed in the field.

Type of Degree or Certificate

Short Term Certificate

42 Total Credit Hours

Light Commercial HVAC Service

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
HVA	140	HVAC Installation Techniques	3
INT	141	Applied Shop Mathematics I	3
EET	119	Basic Electrical Circuits & Controls	4
HVA	162	HVAC Loads & Distribution for Small Buildings	3
HVA	144	Introduction to HVAC Systems	3
			<u>3</u>
TOTAL			16
SECOND QUARTER			
COM	206	Interpersonal Communication	3
HVA	160	Basics of Heating & Heating Systems	3
HVA	180	Boilers in the HVAC Systems	3
HVA	184	Basics of Cooling & Cooling Systems	3
			<u>3</u>
TOTAL			12
THIRD QUARTER			
ARC	139	Mechanical Systems Blueprint Reading	2
EER	139	Electrical Machinery	3
HVA	177	Testing, Adjusting & Balancing in HVAC Systems	3
HVA	190	HVAC Mechanical Troubleshooting	3
HVA	194	HVAC Electrical Troubleshooting	3
			<u>3</u>
TOTAL			14

Manufacturing Management

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
IET	101	Work Methods Analysis & Improvement	3
IET	115	Survey of Production Control	2
IET	125	Introduction to World-Class Manufacturing	3
IET	126	Supervision & Work Teams Leadership	3
IET	135	Manufacturing Cost Analysis	3
MAN	105	Introduction to Business	3
PSY	229	Work Group Dynamics	3
QET	101	Survey of Total Quality	2
TOTAL			23

Students may select one of the following courses to use as a substitution for a course in the Manufacturing Management certificate:

COM	211	Effective Speaking I	3
ENG	121	Technical Communications I	3
LAS	105	Introduction to Organized Labor in America	3
MAN	210	Introduction to Project Management	3
PHI	209	Business Ethics	3
QET	223	ISO/QS 9000 Quality Systems	3
SRM	211	Industrial Safety I	3

Short Term

Description

This certificate provides a manufacturing specific background in organizations, industrial supervision, improvement techniques, quality, safety, teamwork, and cost analysis. In addition, an elective provides students an opportunity to customize the program according to their individual needs and interests.

Type of Degree or Certificate

Short Term Certificate

23 Total Credit Hours

Career Opportunities

The purpose is to assist individuals in their transition from a technical job (engineer, technician, production worker, etc.) to a managerial position (foreman, supervisor, manager, etc.) in the manufacturing industry.

Short Term

Description

This short term certificate provides both theory and practice in measuring parts and processes, analyzing the result and determining the forms of error that contribute to the uncertainty of the measurements. A good measurement system is an underlying requirement for improving quality, throughput, and waste problems. This certificate focuses on calibration and dimensional measurements, including coordinate measurements. Pressure, temperature, and mass are also covered. This certificate provides sufficient background to pass the ASQ certified calibration Technician exam. The courses in this short term certificate applies directly to the Quality Engineering Technology degree.

Type of Degree or Certificate

Short Term Certificate

35 Total Credit Hours

Measurement & Calibration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
QET	100	Tooling & Machining Metrology	2
MAT	101	Elementary Algebra	4
QET	M30	Introduction to Materials & Manufacturing Processes	1
ETD	198	Personal Computer Applications for Engineering Technology	2
ETD	128	Print Reading with GD&T	3
TOTAL			12
SECOND QUARTER			
QET	120	Process Metrology	3
QET	101	Survey of Total Quality	2
QET	171	Lab for QET 101	1
QET	113	Coordinate Measurement	3
TOTAL			9
THIRD QUARTER			
QET	201	Statistical Process Control	2
QET	181	Lab for QET 201	1
MAT	131	Technical Mathematics I	5
TOTAL			8
FOURTH QUARTER			
QET	217	Measurement & Calibration	2
QET	185	Lab for QET 217	1
QET	200	Quality Technician Review	2
QET	266	Certified Calibration Technician Review	1
TOTAL			6

Mechanical Maintenance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ETD	160	Mechanics for Skilled Trades	3
ETD	161	Advanced Mechanics for Skilled Trades	3
ETD	165	Industrial Hydraulics I	3
ETD	166	Industrial Hydraulics II	3
ETD	167	Industrial Hydraulics III	3
TOTAL			15

Rescue Technician

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
FST	169	Rapid Intervention Team	2
FST	171	Introduction to Technical Rescue	3
FST	173	Rope Rescue	3
FST	174	Confined Space Rescue	3
FST	179	Victim Location, Operation Level	2
TOTAL			13
SECOND QUARTER			
FST	172	Vehicle Rescue	2
FST	175	Machine/Rigging Rescue	2
FST	176	Trench Rescue	2
FST	177	Building Collapse Rescue	3
EMS	115	EMT-Basic Theory & Practice 1	5
TOTAL			14
THIRD QUARTER			
FST	178	Swift Water Rescue	3
EMS	116	EMT-Basic Theory & Practice II	3
TOTAL			6

Short Term

Description

This program is intended for anyone involved in mechanical maintenance to improve their troubleshooting skills. This is a hands-on program that looks at how machines operate, proper methods of maintenance and rebuild, and a heavy concentration on power hydraulics, hydraulic circuits, the control of hydraulic circuits, and the proper techniques for troubleshooting and maintenance.

Type of Degree or Certificate

Short Term Certificate

15 Total Credit Hours

EGR

Short Term

Description

Training for all emergency responders, urban search and rescue teams, fire, law enforcement, and emergency medical services to (1) understand the role of rescue technician; (2) demonstrate basics of victim care; (3) understand principles of applied physics related to removal of victims; (4) demonstrate safety and survival techniques; and (5) demonstrate correct, safe, and effective state of the art rescue equipment. Students must be working in the field to qualify for this program.

Type of Degree or Certificate

Short Term Certificate

33 Total Credit Hours

www.sinclair.edu
my.Sinclair.edu

Extended Learning & Human Services



I chose Sinclair because it's one of the top schools in education and prepares you for a university.

— Sam Brown



Departments

Planning the Program

The students are required to complete the course work outlined on the following pages for each degree/certificate program. Some courses have prerequisites. Others must be taken in special sequences. **The students should plan a course of studies with an academic counselor or faculty advisor.**

Programs in Extended Learning & Human Services include early childhood education, law enforcement, community based corrections, manual communication, physical education, developmental studies, experience based education, and public services. Students intending to transfer to a four-year college or university should consult an academic counselor to plan a specific transfer program. Graduates of a career program will receive the associate of applied science degree of applied science degree.

Developmental Studies

The Developmental Studies (DEV) department provides an opportunity for students to develop and improve basic skills needed to succeed in college and on the job. Giving support to all academic majors, courses are offered in mathematics, reading, English, and science. To speak with a counselor call (937) 512-2701 or visit Room 6222.

Extended Learning & Human Services

Dayton Correctional Institution and Montgomery Education and Pre-Release Center

The Criminal Justice department coordinates all advanced job training program offerings at the Dayton Correctional Institution (DCI) located at 4104 Germantown Pike and the Montgomery Education and Pre-Release Center (MEPRC) at 1901 South Gettysburg Avenue. These programs are offered through the Ohio Penal Education Consortium, which is an organization made up of all colleges and universities that are under contract with the Ohio Department of Rehabilitation and Correction to provide advanced job training to inmates. Sinclair maintains a satellite office at both prison facilities. Also, a job training coordinator provides additional information to other colleges and universities at both the state and national levels concerning distance learning job training programs and the transferability process of these credits and provides a medium for inmates to obtain information about the realistic opportunities concerning distance learning options while incarcerated. Additional information may be obtained by stopping by the Criminal Justice office, Building 9, Room 9316 or by calling (937) 512-4316 or (937) 512-5111.

Linda Pastore, Interim Dean
(937) 512-2760, Room 6141B

Madelyn Buran
Academic Counselor
(937) 512-2702, Room 6130

Tim McKinney
Academic Counselor
Developmental Studies
(937) 512-2701, Room 6222D

Phyllis Salter
Academic Counselor
Developmental Studies
(937) 512-2701, Room 6222A

Criminal Justice
Dr. Robert Rice, Chairperson
(937) 512-2876, Room 9315

Child & Family Education
Karen Winston, Chairperson
(937) 512-2722, Room 9222

Developmental Studies
Chairperson
(937) 512-2701, Room 6222B

Experience Based Education
Chairperson
(937) 512-2791, Room 3142

Physical Education
Billie Sanders, Chairperson
(937) 512-2860, Room 8023

Academic Advising Office Hours

Monday-Thursday
8:00 a.m. - 7:00 p.m.

Friday
8:00 a.m. - 5:00 p.m.
(4:30 p.m. in summer)

Building 6, First Floor
(937) 512-3700

Physical Education

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
PED	235	Introduction to Physical Education	3
		or	
	250	Introduction to Exercise Science	
		or	
	260	Introduction to Sport Management	
ENG	111	English Composition I	3
PSY	121	General Psychology I	3
PED	200	First Aid & Safety	2
BIO	107	Human Biology	4-5
		or	
	111	General Biology I	
		or	
	141	Principles of Anatomy & Physiology I	
			TOTAL 15-16
SECOND QUARTER			
ENG	112	English Composition II	3
PED	234	Concepts of Total Fitness	3
PSY	122	General Psychology II	3
BIO	112	General Biology II	4-5
		or	
	142	Principles of Anatomy & Physiology II	
		or	
	161	Surgical Anatomy & Physiology I	
BIS	160	Introduction to Word, PowerPoint, & Excel	3
			TOTAL 16-17
THIRD QUARTER			
ENG	113	English Composition III	3
PED	239	Athletic Injuries	3
BIO	113	General Biology III	4-5
		or	
	143	Principles of Anatomy & Physiology III	
		or	
	162	Surgical Anatomy & Physiology II	
PED	236	Personal & Community Health	3
		or	
	261	Athletic Facility Planning & Management	
PED	272	Methods of Teaching Strength Training	2-3
		or	
	263	History of Sport & Physical Education	
PED	—	Physical Education Elective	3
		and	
ALH	130	Electrocardiography for the Health Care Provider	
			TOTAL 18-20

—continued on next page

University Parallel

Description

The track in Physical Education prepares the students for a career in Sports Pedagogy, the teaching of Physical Education pre-K through 12. Students complete the two-year degree and transfer, continuing with the requirements needed to obtain their teaching license. An associate degree with a track in Exercise Science is offered as a continuation of the Exercise Specialist certificate. (See Short Term certificates in this division) This two-year degree gives students the opportunity to study in depth the principles and methods of fitness training and then either enter professional practice or transfer for completion of a baccalaureate degree. Students who complete the Exercise Science track are also eligible to sit for the ACSM (American College of Sports Medicine) Health/Fitness Instructor. The track in Sport and Recreation management provides two years of a solid foundation in sport related business. Course work includes facility management, sport marketing, Coaching & Leadership along with many other respective components of the industry. Students are prepared to enter the profession or transfer for completion of a baccalaureate degree.

Type of Degree or Certificate

Associate of Arts

94-100 Total Credit Hours

Transfer to Four Year

This program is designed for students seeking Physical Education, Exercise Science or Sport and Recreation Management careers and will fulfill the freshman and sophomore educational requirements at most four-year colleges or universities. 94-100 Total Credit Hours

Career Opportunities

The Physical Education program at Sinclair is designed for students who wish to transfer to four-year institutions to acquire a bachelor degree. Employment opportunities are available in teaching at elementary, intermediate or high schools, and in private and corporate fitness centers.

University Parallel

Description

Physical Education Track

DIT 111, PED 235, PED 236, PED 238,
PED 263, PED 268, PED 269

Exercise Science Track

ALH 130, DIT 111, PED 193, PED 236,
ED 250, PED 251, PED 252, PED 272

Sport and Recreation Management

FIN 208, MRK 208, PED 249, PED 260,
PED 261, PED 263

Physical Education (continued)

FOURTH QUARTER

COM	206	Interpersonal Communication	3
HIS	101	United States History (1607-1815)	3
	111	or Western Civilization (0-1300) Humanities Elective*	3
PED	237	Organization & Administration of Recreation, Fitness & Sports Programming	3
PED	249	Principles of Coaching & Leadership	3
	193	or Physical Fitness Evaluation	
	268	or Motor Development	
		TOTAL	15

FIFTH QUARTER

MAT	122	Statistics I	3-5
	116	or College Algebra	
	108	or Math & the Modern World	
HIS	102	United States History (1815-1919)	3
	112	or Western Civilization (1300-1815) Humanities Elective*	3
COM	211	Effective Public Speaking	3
PED	269	Motor Learning & Performance	3
	251	or Principles & Methods of Training I	
MRK	208	or Sport Marketing	
		TOTAL	15-17

SIXTH QUARTER

PED	270	Physical Education Internship	3
HIS	103	United States History (1919-Present)	3
	113	or Western Civilization (1815-present)	
SOC	_____	Social & Behavioral Elective	3
FIN	208	Sport Finance	3
		or	
DIT	111	Nutrition for a Healthy Lifestyle	
PED	_____	Physical Education Elective	3
	252	or Principles & Methods of Training II	
	238	or Physical Education for the Elementary School	
		TOTAL	15

*See page 80.

Public Services

Human Services Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
PSY	121	General Psychology I	3
ENG	111	English Composition I	3
DIS	105	Introduction to Developmental Disabilities	4
COM	211	Effective Speaking I	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
			3
TOTAL			16
SECOND QUARTER			
ENG	112	English Composition II	3
PSY	122	General Psychology II	3
SOC	111	General Sociology I	3
BIO	111	General Biology I	4
DIS	115	Human Service Delivery Systems & Resources	3
			3
TOTAL			16
THIRD QUARTER			
ENG	113	English Composition III	3
SOC	112	General Sociology II	3
BIO	112	General Biology II	4
—		Humanities Elective*	3
			3
TOTAL			13
FOURTH QUARTER			
SOC	145	Comparing Cultures	3
BIO	113	General Biology III	4
SWK	206	Social Work as a Profession	4
MAT	108	Math & the Modern World	3
—		General Education Elective*	3
			3
TOTAL			17
FIFTH QUARTER			
SOC	205	Social Problems	4
SWK	211	Basic Practice Theory I	3
DIS	126	Collaboration with Families	3
LEP	130	Family Violence	3
—		General Education Elective*	3
			3
TOTAL			16
SIXTH QUARTER			
PSY	217	Abnormal Psychology	4
DIS	131	Counseling Principles & Developmental Disabilities	3
—		Humanities Elective*	3
—		Psychology Elective	3
SWK	212	Basic Practice Theory II	4
			4
TOTAL			17

*See page 80.

NOTE: To complete the Ohio Transfer Module, see academic advisor.

University Parallel

Description

This option prepares students for entry level positions in the broad field of human services, as well as for transfer to complete a baccalaureate degree in human services, counseling, social work or a related field.

Type of Degree or Certificate

Associate of Arts

95 Total Credit Hours

Career Opportunities

Students who complete this program are qualified for paraprofessional roles in child, youth and family services; human services; community development; group homes; and family assistance.

ELHS

University Parallel

Description

This program provides a foundation for transfer to similar programs at four-year colleges or universities. For students graduating with the associate of arts degree, job advancement has frequently become a planned, positive outcome in public services.

Type of Degree or Certificate

Associate of Arts

94-96 Total Credit Hours

Career Opportunities

Graduates may also find job opportunities at the paraprofessional level in welfare agencies, government organizations, and related programs.

Public Services

Public Administration Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
ENG	111 English Composition I	3
	Humanities Elective*	3
MAN	105 Introduction to Business	3
PLS	101 American Federal Government I	3
SOC	111 General Sociology I	3
	TOTAL	15
SECOND QUARTER		
PSY	121 General Psychology I	3
ENG	112 English Composition II	3
PLS	102 American Federal Government II	3
COM	211 Effective Speaking I	3
SOC	112 General Sociology II	3
	TOTAL	15
THIRD QUARTER		
ENG	113 English Composition III	3
PLS	103 State Government	3
PSY	122 General Psychology II	3
SOC	205 Social Problems	4
	Mathematics Elective	3-5
	TOTAL	16-18
FOURTH QUARTER		
ACC	111 Principles of Accounting I	3
BIS	105 Computer Concepts	3
MAN	205 Principles of Management	3
SOC	145 Comparing Cultures	3
BIO	111 General Biology I	4
	TOTAL	16
FIFTH QUARTER		
	Internship	3
ACC	112 Principles of Accounting II	3
BIO	112 General Biology II	4
	Humanities Elective*	6
	TOTAL	16
SIXTH QUARTER		
BIO	113 General Biology III	4
PLS	104 Urban Government	3
	Humanities Elective*	6
	Social Science Elective	3
	TOTAL	16

*See page 80.

NOTE: To complete the Ohio Transfer Module, see academic advisor.

American Sign Language

Interpreting for the Deaf

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ASL	101	Orientation to Deafness	3
ASL	228	Intermediate American Sign Language I	4
ENG	111	English Composition I	3
PSY	121	General Psychology I	3
COM	211	Effective Speaking I	3
TOTAL			16
SECOND QUARTER			
ASL	102	Interpreting For Deaf I	3
ASL	116	Community Resources for the Deaf	3
ASL	229	Intermediate American Sign Language II	4
ENG	112	English Composition II	3
PSY	122	General Psychology II	3
TOTAL			16
THIRD QUARTER			
ASL	103	Interpreting for Deaf II	3
ASL	230	Intermediate American Sign Language III	4
ASL	201	Interpreting I	4
ASL	207	Role of Interpreter	3
ENG	116	Advanced Vocabulary Building	3
TOTAL			17
FOURTH QUARTER			
		American Sign Language Elective	3
		Mathematics Elective	4
DIS	206	Computer Literacy & Assistive Technology	1
		Humanities Elective*	3
TOTAL			11
FIFTH QUARTER			
ASL	202	Interpreting II	4
ASL	231	Advanced American Sign Language I	4
ASL	236	Transliterating	4
ASL	261	ASL Practicum I	3
PSY	117	Psychology of Deafness	3
TOTAL			18
SIXTH QUARTER			
ASL	203	Interpreting III	4
ASL	211	Medical/Technical/Legal Interpreting	4
ASL	232	Advanced American Sign Language II	4
ASL	262	ASL Practicum II	3
TOTAL			15
SEVENTH QUARTER			
ASL	204	Interpreting IV	4
ASL	212	Specialized Interpreting	4
ASL	233	Advanced American Sign Language III	4
ASL	263	ASL Practicum III**	3
TOTAL			15

*See page 80.

**All students must receive a grade of "C" or better.

Career Program

Description

This program prepares students for entry level interpreting/transliterating positions in which deaf or hard-of-hearing persons and hearing persons need to communicate. It provides an opportunity for students to develop skills in American Sign Language and manually coded English. It also provides a basic understanding of deaf culture, interpreting ethics, and legislation having an impact on individuals with disabilities. This program is approved by the Ohio Department of Education to meet the standards for a five-year license as Interpreter for the Hearing Impaired.

Type of Degree or Certificate

Associate of Applied Science

108 Total Credit Hours

Transfer to Four Year

A transfer articulation is available to students planning on completing a four-year degree in Rehabilitation from Wright State University.

Career Opportunities

Employment opportunities are available in areas such as educational, medical, legal, theatrical, governmental and religious interpreting.

Career Program

Description

This program prepares students to work in areas relating to the diversion of potential offenders and the rehabilitation of convicted offenders in a community based setting. Students develop on-the-job counseling techniques, gain an understanding of the civil and constitutional rights of prisoners, and develop the knowledge to interpret the justice system.

Type of Degree or Certificate

Associate of Applied Science

93 Total Credit Hours

Corrections

Community Based Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
SOC	111	General Sociology I	3
LEP	101	Constitutional Law	3
COR	105	Alternatives to Prison	3
COR	106	Introduction to Corrections	3
			TOTAL
			15
SECOND QUARTER			
ENG	112	English Composition II	3
PSY	121	General Psychology I	3
COR	101	Corrections Ethics	3
COR	103	Legal Issues in Correctional Institutions	3
---		Mathematics Elective	4
			TOTAL
			16
THIRD QUARTER			
ENG	113	English Composition III	3
		or	
	131	Business Communications I	
PSY	122	General Psychology II	3
COR	104	Written Communications in Corrections	3
SOC	226	Criminology	3
COR	126	Correctional Services in the Community	3
			TOTAL
			15
FOURTH QUARTER			
SOC	205	Social Problems	4
		Physical or Biological Science Elective	3
COR	205	Law & the Juvenile Offender	3
PSY	218	Principles of Counseling	4
COM	211	Effective Speaking I	3
		or	
	206	Interpersonal Communication	
			TOTAL
			17
FIFTH QUARTER			
COR	270	Corrections Internship	3
PLS	103	State Government	3
		Management Elective	3
SOC	225	Juvenile Delinquency	3
		or	
		Social Science Elective*	
COR	206	Corrections	3
			TOTAL
			15
SIXTH QUARTER			
COR	270	Corrections Internship	3
		or	
	295	Corrections Seminar	
SOC	227	Probation & Parole	3
		or	
		Social Science Elective*	
PLS	104	Urban Government	3
COR	226	Contemporary Practices in Corrections	3
---		Humanities Elective*	3
			TOTAL
			15

*See page 80.

Corrections

Institutional Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
COR	101	Corrections Ethics	3
COR	106	Introduction to Corrections	3
ENG	111	English Composition I	3
LEP	101	Constitutional Law	3
SOC	111	General Sociology I	3
			3
TOTAL			15
SECOND QUARTER			
ENG	112	English Composition II	3
PSY	121	General Psychology I	3
COR	103	Legal Issues in Correctional Institutions	3
COR	105	Alternatives to Prison	3
	—	Mathematics Elective	4
			4
TOTAL			16
THIRD QUARTER			
ENG	113	English Composition III	3
		or	
	131	Business Communications I	
COR	126	Correctional Services in the Community	3
SOC	226	Criminology	3
COR	102	Crisis Intervention	3
PSY	122	General Psychology II	3
			3
TOTAL			15
FOURTH QUARTER			
PSY	217	Abnormal Psychology	4
COM	206	Interpersonal Communication	3
		or	
	211	Effective Speaking I	
	—	Physical or Biological Science Elective	3
SOC	205	Social Problems	4
COR	104	Written Communications in Corrections	3
			3
TOTAL			17
FIFTH QUARTER			
COR	270	Corrections Internship**	3
		or	
	—	Career Related Elective	
COR	206	Corrections	3
	—	Management Elective	3
PLS	103	State Government	3
SOC	—	Social Science Elective*	3
		or	
	225	Juvenile Delinquency	
			3
TOTAL			12
SIXTH QUARTER			
PLS	104	Urban Government	3
COR	226	Contemporary Practices in Corrections	3
	—	Humanities Elective*	3
COR	270	Corrections Internship	3
		or	
	295	Corrections Seminar	
SOC	227	Probation & Parole	3
		or	
	—	Social Science Elective*	
			3
TOTAL			15

*See page 80.

**Department of Rehabilitation & Corrections (DRC) endorsed students must complete two internships (COR 270) inside a DRC facility.

Career Program

Description

This program prepares students to work in areas relating to the diversion of potential offenders and the rehabilitation of convicted offenders in an institutional setting. Students develop on-the-job counseling techniques, gain an understanding of the civil and constitutional rights of prisoners, and develop the knowledge to interpret the justice system.

Type of Degree or Certificate

Associate of Applied Science

93 Total Credit Hours

Career Program

Description

This program provides the knowledge, skills, and competencies important to an entry level teacher working with, or planning to work with, young children. It meets the Pre-kindergarten Associate Teacher Licensure standards established by the State of Ohio Department of Education. Graduates of this program are eligible to apply to the Ohio Department of Education for the Pre-kindergarten Associate Teacher Licensure.

NOTE: Students interested in completing this degree program must have a full criminal background investigation completed before enrolling in second quarter courses.

Type of Degree or Certificate

Associate of Applied Science

106 Total Credit Hours

Career Opportunities

A two-plus-two transfer articulation is available to students planning on completing a four-year degree in Early Childhood Education from the University of Dayton and Central State University.

Students interested in applying for Ohio Department of Education Pre-Kindergarten Licensure, must comply with the following criteria:

- complete an interview prior to graduation with the CFE Department Chairperson
- "C" or better in all ECE courses
- complete a criminal background check

Early Childhood Education

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ECE	106	Childhood Nutrition, Health, & Safety	3
ECE	150	The Young Child	4
ENG	111	English Composition I	3
SOC	111	General Sociology I	3
BIS	_____	Business Information Systems Elective	2
ECE	101	Introduction to Early Childhood Education	3
			TOTAL
			18
SECOND QUARTER			
ECE	120	Observing Young Children	3
ECE	145	Guidance & Discipline	3
ENG	112	English Composition II	3
SOC	215	Cultural Diversity	4
PSY	121	General Psychology I	3
			TOTAL
			16
THIRD QUARTER			
ECE	117	Language Experiences in Early Childhood	4
ECE	146	The Challenging Child	3
COM	211	Effective Speaking I	3
ENG	113	English Composition III	3
PSY	122	General Psychology II	3
			TOTAL
			16
FOURTH QUARTER			
ECE	119	Art & Music Experiences in Early Childhood	4
ECE	229	Principles & Practices of Interaction	3
ECE	118	Math & Science Experiences in Early Childhood	4
	_____	Early Childhood Education Elective	2
	_____	Humanities Elective*	3
			TOTAL
			16
FIFTH QUARTER			
DIS	205	Inclusion: Principles & Practices	4
ECE	160	Teaching Techniques in ECE	3
SOC	115	Today's Changing Family	4
	_____	General Education Elective*	3
			TOTAL
			14
SIXTH QUARTER			
ECE	215	Building Family & Community Relationships	3
ECE	280	Student Teaching I	6
	_____	Early Childhood Education Elective	3
	_____	General Education Elective*	3
			TOTAL
			15
SEVENTH QUARTER			
ECE	281	ECE Student Teaching II	7
	_____	Mathematics Elective	4
			TOTAL
			11

*See page 80.

Law Enforcement Industrial/Retail Security Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I	3
FST	101	Introduction to Fire Science	4
PLS	101	American Federal Government I	3
LEP	101	Constitutional Law	3
LEP	107	Security Administration	3
			3
TOTAL			16
SECOND QUARTER			
ENG	112	English Composition II	3
PSY	121	General Psychology I	3
PLS	102	American Federal Government II	3
LEP	102	Criminal Law	3
LEP	117	Principles of Loss Prevention	3
			3
TOTAL			15
THIRD QUARTER			
ENG	113	English Composition III	3
PSY	122	General Psychology II	3
LEP	104	Criminal Evidence & Procedures	3
FST	125	Fire Investigation Procedure	4
SOC	111	General Sociology I	3
			3
TOTAL			16
FOURTH QUARTER			
PLS	103	State Government	3
			3
			3
SRM	211	Applied Industrial Risk Management	3
LEP	217	Current Security Problems	3
SOC	205	Social Problems	4
			4
TOTAL			16
FIFTH QUARTER			
PLS	104	Urban Government	3
			4
			4
SRM	230	Occupational Safety & Health	4
COM	211	Effective Speaking I	3
SOC	225	Juvenile Delinquency	3
			3
TOTAL			17
SIXTH QUARTER			
			3
			3
			3
			3
LEP	295	Seminar in Law Enforcement & Administration of Justice	3
SOC	226	Criminology	3
			3
TOTAL			15

*See page 80.

Career Program

Description

This program prepares students for careers within the private security sector. It is designed for students who are new to Industrial/Retail security as well as students who have experience as practitioners. Students will learn the various security duties required in corporate industrial, retail and contract work sites.

Type of Degree or Certificate

Associate of Applied Science

95 Total Credit Hours

Career Opportunities

Employment opportunities for security professionals are available in a wide variety of businesses, including factories, warehouse facilities, office buildings, stores, and shopping malls.

Career Program

Description

This program prepares students for careers as police officers. It is designed for students who are new to law enforcement, as well as for those who are already employed as police officers and want to add to their knowledge and perform well on civil service exams for promotions.

Type of Degree or Certificate

Associate of Applied Science

92-93 Total Credit Hours

Career Opportunities

The job outlook for police work is good. However, because current pay levels are high, it is a highly competitive field. Requirements for entry into the police field are stringent, requiring physical, mental and psychological testing, background investigation, training, and probationary work period. Since promotion is dependent on civil service test scores, continuing education and training is a must.

Law Enforcement Police Science Option

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
COR	101	Corrections Ethics	3
ENG	111	English Composition I	3
LEP	101	Constitutional Law	3
LEP	115	Police Operations	3
LEP	105	Introduction to Law Enforcement & Criminal Justice	3
		or	
COR	106	Introduction to Corrections	
			TOTAL
			15
SECOND QUARTER			
ENG	112	English Composition II	3
PSY	121	General Psychology I	3
PLS	104	Urban Government	3
LEP	102	Criminal Law	3
LEP	125	Police Organization & Administration	3
			TOTAL
			15
THIRD QUARTER			
ENG	113	English Composition III	3
		or	
	131	Business Communications I	
PSY	122	General Psychology II	3
SOC	111	General Sociology I	3
LEP	104	Criminal Evidence & Procedures	3
LEP	205	Criminal Investigation	3
			TOTAL
			15
FOURTH QUARTER			
PLS	103	State Government	3
		Physical or Biological Science Elective	3
SOC	205	Social Problems	4
LEP	215	Introduction to Forensic Science	3
LEP	225	Intergroup Relations of Police Officers	3
			TOTAL
			16
FIFTH QUARTER			
COM	211	Effective Speaking I	3
		or	
	206	Interpersonal Communication	
SOC	130	Family Violence	3
		or	
	225	Juvenile Delinquency	
		Law Enforcement Elective	3
		Management Elective	3
BIS	160	Introduction to Word, Powerpoint, & Excel	3
			TOTAL
			15
SIXTH QUARTER			
		Law Enforcement Elective	3
		Mathematics Elective	4
LEP	295	Seminar in Law Enforcement & Administration of Justice	3
SOC	226	Criminology	3-4
		or	
	215	Cultural Diversity	
		Humanities Elective*	3
			TOTAL
			16-17

*See page 80.

Deaf Studies

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ASL	101	Orientation to Deafness	3
ASL	228	Intermediate American Sign Language I	4
		American Sign Language Elective	3
PSY	117	Psychology of Deafness	3
ENG	111	English Composition I	3
		TOTAL	16
SECOND QUARTER			
PSY	121	General Psychology I	3
ENG	112	English Composition II	3
ASL	116	Community Resources for the Deaf	3
ASL	229	Intermediate American Sign Language II	4
		TOTAL	13
THIRD QUARTER			
ASL	230	Intermediate American Sign Language III	4
ASL	201	Interpreting I	4
		American Sign Language Elective	4
DIS	206	Computer Literacy & Assistive Technology	1
PSY	122	General Psychology II	3
		TOTAL	16

Certificate

Description

Students completing this certificate will obtain valuable and practical skill in American Sign Language. Completion of this certificate can lead to a variety of rewarding career opportunities communicating with the deaf and hard-of-hearing. Placement test results may indicate need for developmental mathematics, reading, and/or English, prior to certificate course work.

Type of Degree or Certificate

Certificate

45 Total Credit Hours

Certificate

Description

This program prepares individuals to work with young children in a variety of education and child care settings. Those individuals completing this certificate will meet Ohio Job & Family Services Child Day Care Center licensing requirements for child care staff training.

Type of Degree or Certificate

Certificate

45 Total Credit Hours

Early Childhood Studies

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ECE	101	Introduction to Early Childhood Education	3
ECE	106	Childhood Nutrition, Health, & Safety	3
ECE	150	The Young Child	4
ENG	111	English Composition I	3
			<u>3</u>
TOTAL			13
SECOND QUARTER			
ECE	145	Guidance & Discipline	3
ECE	120	Observing Young Children	3
		Early Childhood Education Elective	3
SOC	111	General Sociology I	3
COM	211	Effective Speaking I	3
			<u>3</u>
TOTAL			15
THIRD QUARTER			
ECE	117	Language Experiences in Early Childhood	4
ECE	135	Group Care for Infant and Toddler	3
ECE	146	The Challenging Child	3
		Early Childhood Education Elective	3
DIS	205	Inclusion: Principles & Practices	4
			<u>4</u>
TOTAL			17

Human Services

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
PSY	121	General Psychology I	3
SOC	111	General Sociology I	3
ENG	111	English Composition I	3
		General Education Elective*	3
COM	211	Effective Speaking I	
		or	
	225	Small Group Communication	3
		or	
	206	Interpersonal Communication	
		TOTAL	15
SECOND QUARTER			
ENG	112	English Composition II	3
PSY	122	General Psychology II	3
SOC	205	Social Problems	4
SOC	145	Comparing Cultures	3
SOC	112	General Sociology II	3
		TOTAL	16
THIRD QUARTER			
SOC	215	Cultural Diversity	4
		Social Science Elective	3
MAT		Mathematics Requirement**	4-5
		General Education Elective*	3
		TOTAL	14-15

* See page 80.

** Placement test results may indicate need for developmental mathematics, reading, and/or English. The student must complete DEV courses, if indicated, prior to enrolling in courses required in this certificate.

Certificate

Description

Students pursuing this certificate learn about the social context for human development and interaction, along with basic skills for effective oral and written communication. Credits earned in this certificate program are applicable to the associate of arts degree in Public Services, Human Services option.

Type of Degree or Certificate

Certificate

45-46 Total Credit Hours

Career Opportunities

This certificate may be helpful in obtaining employment in the broad field of human services, and it also provides a foundation for further study.

Certificate

Description

This program prepares individuals to work with Infant & Toddler children in a variety of education settings. Those individuals completing this certificate will meet state of Ohio Child Day Care Center requirements for child care staff training.

Type of Degree or Certificate

Certificate

38 Total Credit Hours

Infant/Toddler Education

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
ECE 101	Introduction to Early Childhood Education	3
ECE 104	Prenatal Life & Birth	3
ECE 106	Childhood Nutrition, Health, & Safety	3
ECE 120	Observing Young Children	3
ECE 150	The Young Child	4
ECE 111	Child Abuse Recognition & Prevention	1
	TOTAL	17
SECOND QUARTER		
ECE 135	Group Care for Infant & Toddler	3
ECE 117	Language Experiences in Early Childhood	4
ECE 112	E.C.E. First Aid	1
ECE 113	Communicable Diseases: Prevention & Recognition	1
ENG 111	English Composition I	3
	TOTAL	12
THIRD QUARTER		
—	Social Science Elective*	9
	TOTAL	9

*See page 80.

NOTE: Internship is a working experience involving infants and toddlers in a group setting. It must be approved as a valid learning experience by the instructor. Department criteria regarding internships must be met.

Urban Studies

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
ENG	111	English Composition I**	3
SOC	111	General Sociology I	3
MAT	_____	Mathematics Requirement (MAT 100 series)	4-5
MAN	105	Introduction to Business	3
	_____	General Education Elective*	3
			TOTAL 16-17
SECOND QUARTER			
PLS	104	Urban Government	3
BIS	105	Computer Concepts	3
ACC	111	Principles of Accounting I	3
ENG	112	English Composition II	3
SOC	112	General Sociology II	3
			TOTAL 15
THIRD QUARTER			
MAN	205	Principles of Management	3
SOC	145	Comparing Cultures	3
	_____	Psychology/Sociology Elective	3
ACC	112	Principles of Accounting II	3
COM	285	Business & Professional Communication	3
			TOTAL 15

*See page 80 and check with counselor

**Placement testing results may indicate need for developmental mathematics, reading, and/or English.

Certificate

Description

This certificate adds value to a resume and provides a springboard to continuing education. The public administration option under the Public Services associate of arts degree is the program most often followed by students after completion of the Urban Studies certificate.

Type of Degree or Certificate

Certificate

46-47 Total Credit Hours

Short Term

Description

This certificate is designed to provide students with the basics necessary for entry level employment in a correctional facility. These courses can be applied to the associate degree in Institutional Corrections if desired.

Type of Degree or Certificate

Short Term Certificate

44 Total Credit Hours

Corrections

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
LEP	101	Constitutional Law	3
COR	106	Introduction to Corrections	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
ENG	131	Business Communications I	3
COR	101	Corrections Ethics	3
TOTAL			15
SECOND QUARTER			
COR	102	Crisis Intervention	3
COR	103	Legal Issues in Correctional Institutions	3
COR	104	Written Communications in Corrections	3
COR	105	Alternatives to Prison	3
COR	206	Corrections	3
TOTAL			15
THIRD QUARTER			
PED	200	First Aid & Safety	2
COR	126	Correctional Services in the Community	3
COR	205	Law & the Juvenile Offender	3
COR	226	Contemporary Practices in Corrections	3
COR	295	Corrections Seminar	3
TOTAL			14

Exercise Specialist

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIO	107	Human Biology	5
ENG	111	English Composition I	3
PED	106	Weight Training	1
PED	154	Aerobic Conditioning	1
PED	200	First Aid & Safety	2
PED	250	Introduction to Exercise Science	3
TOTAL			15
SECOND QUARTER			
ENG	112	English Composition II	3
PED	193	Physical Fitness Evaluation	3
PED	234	Concepts of Total Fitness	3
PED	236	Personal & Community Health	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
TOTAL			15
THIRD QUARTER			
COM	211	Effective Speaking I	3
DIT	111	Nutrition for a Healthy Lifestyle	3
PED	239	Athletic Injuries	3
PED	271	Certification Exam Preparatory Course	3
PED	272	Methods of Teaching Strength Training	2
TOTAL			14

Short Term

Description

Sinclair's Exercise Specialist certificate is designed to provide necessary knowledge and skills for employment in the fitness and exercise industry. Students acquire knowledge and skills in exercise science with the goal of being able to administer basic fitness assessments and health risk appraisals. Additionally, students acquire current information on exercise, nutrition and wellness and prepare to sit for and successfully pass a national certification exam.

Type of Degree or Certificate

Short Term Certificate

44 Total Credit Hours

Career Opportunities

This certificate is designed to provide students with the knowledge and skills for employment in the fitness and exercise industry. Students will be trained scientifically with the goal of being able to administer basic fitness assessments and health risk appraisals. Students will also be trained to communicate current information on exercise, nutrition and wellness.

ELHS

www.sinclair.edu
my.Sinclair.edu

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Fine & Performing Arts



*I go to Sinclair for
the affordable
tuition and
individual
attention.*

— Adri Liebenberg

Departments

Planning the Program

Students are required to complete the course work below to earn a degree or certificate for a particular Fine & Performing Arts program. Some courses have prerequisites. Others must be taken in special sequences. **Students should plan a course of study with an academic counselor, Room 6130, (937) 512-2544.**

Students choosing a career in Fine & Performing Arts may select a university parallel or career program. The Fine & Performing Arts (University Parallel) programs are for students who intend to transfer to a four-year college or university. These include Art, Music Performance, Music Education, Communication Arts, Theatre Performance, Theatre Technical, and Dance. Graduates of these programs will earn the associate of arts degree and will usually receive junior status at the four-year school. Specific transfer programs may be obtained from an academic counselor, Room 6130, (937) 512-2544. The Fine & Performing Arts career programs prepare students for employment in visual communications, interior design, and printing technologies. Graduates will receive the associate of applied science degree.

Fine & Performing Arts

Articulation Agreements

Art Academy of Cincinnati
Visual Communications, Art

University of Dayton
Music, Communication

Wright State University
Music, Communication, Art
Visual Communications

Dr. Sally A. Struthers, Dean
(937) 512-2881, Room 2217

Sheila Magnuson
Academic Counselor
(937) 512-2544, Room 6130

Dodie Munn
Academic Counselor
(937) 512-2544, Room 6130

Art
Kelly Joslin, Chairperson
(937) 512-5381, Room 13201

Design
Shari Rethman, Chairperson
(937) 512-4505, Room 13212

Communication Arts
Dr. Lori Zakel, Chairperson
(937) 512-4580, Room 2222

Music
Dr. Robert Ruckman, Chairperson
(937) 512-4580, Room 2220

Theatre/Dance
Dr. Kathleen Cleary, Chairperson
(937) 512-4580, Room 2220

Academic Advising Office Hours

Monday-Thursday
8:00 a.m. - 7:00 p.m.

Friday
8:00 a.m. - 5:00 p.m.
(4:30 p.m. in summer)

Building 6, First Floor
(937) 512-3700

Art*

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

I. Ohio Transfer Module (54 hours)

Completion of the Ohio Transfer Module as follows:

English - 9 hours

Mathematics - 3 hours

Natural & Physical Science - 12 hours

Social & Behavioral Science - 15 hours

Choose from at least two areas:

Arts & Humanities - 15 hours - ART 231, 232, 233

Plus 6 additional credits, 3 of which must be other than ART

II. Computer (3 hours)

BIS 105 Introduction to Computers

or

BIS 160 Introduction to Word, PowerPoint & Excel

III. Communication (3 hours)

COM 211

IV. Foundation Art & Design (15 hours)

ART 111, 112, 113

ART 108

ART 131

V. Fine Art Core (7 hours)

ART 161

ART 195, 295

ART 270 (1 hour)

VI. Fine Art Concentration (12 hours)

One sequence required:

ART 121, 122, 123

ART 132, 133, 251

ART 141, 142, 143

ART 162, 163 and photography elective

ART 211, 212, 213

VII. Elective (8 hours)

Choose 8 hours of ART courses not used above.

* Sinclair's Art department is accredited by the National Association of Schools of Art and Design (NASAD).

University Parallel

Description

The Art university parallel program is oriented toward students who intend to transfer to a four-year college or university. The Art curriculum challenges the students' creative and thinking abilities with its studio and art history courses.

Type of Degree or Certificate

Associate of Arts

102 Total Credit Hours

Career Opportunities

For students who want a career in art, the faculty of working professional artists will advise and assist in developing techniques and a body of work that will transfer well to other colleges and universities. If the goal is to set up a working studio after graduation, students will be given the necessary information by the faculty.

Although the most obvious career for college graduates with Art degrees is that of fine artists, there are other opportunities which require the skill, knowledge and talents gained through the study of Art. These include art teachers, art historians, art curators, and art therapists.

University Parallel Description

Communication Arts is the study of interactions between people in interpersonal, small group, public speaking, organizational, and mass media settings. This degree can lead to a successful transfer to a four-year college or university baccalaureate program. A communication degree can provide opportunities in journalism, speech education, business, industry, government, broadcast media, law, ministry, social services and public relations. Through careful course selection and internship experience, a program of study can be planned to satisfy students' particular educational and career interests. Enhancing communication skills provides invaluable benefits for all students, regardless of major. See an academic counselor for appropriate course selection.

Type of Degree or Certificate

Associate of Arts

91 Total Credit Hours

Career Opportunities

Associate of Arts degrees in communication from Sinclair can lead to a successful transfer to four-year colleges or universities. This can provide career opportunities in such areas as communication, journalism, broadcast media, education, business, industry, government, law, ministry, social services, public relations, or provide valuable communication skills to enrich any career.

Transfer to Four Year

Specific articulation agreements have been developed with Wright State University and University of Dayton.

Communication Arts

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

I. Ohio Transfer Module (54 hours)

Completion of the minimum requirements in each of the categories of the Transfer Module with an additional 6 credit hours from both the Social/Behavioral and Art/Humanities to equal a total of 54 hours

English - 9 hours

Mathematics - 3 hours

Natural & Physical Science - 12 hours

Social & Behavioral Science - 15 hours

Choose from at least two areas:

Arts & Humanities - 15 hours

Choose from at least two areas

II. Computer (3 hours)

BIS 160 (3 hours)

III. Communication (22 hours)

Required:

COM 201, 206, 211, 225, 278*

Choose three courses:

COM 212, 215, 227, 230, 235, 245, 260, 265, 270, 285

COM 286, 287, 290, 297

JOU 101, 102, 270

IV. Electives (12 hours)

Courses must be approved by an academic counselor.

* Students should keep copies of all communication course projects, papers, etc., for completion of the capstone.

Dance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

I. Ohio Transfer Module (54 hours)

Completion of the Ohio Transfer Module as follows:

- English (9 hours)
- Mathematics (3 hours)
- Natural & Physical Science (12 hours)
- Social & Behavioral Science (15 hours)

Choose from at least two areas:

- Arts/Humanities (15 hours) (DAN 155, DAN 157, MUS 115 plus any 6 hours from the OTM)

II. Computer (3 hours)

- BIS 160 Introduction to Word, Powerpoint, & Excel

III. Communication (3 hours)

- COM 206 Interpersonal Communication

IV. Dance Electives (3 hours)

- MUS 121 Piano Class
- or
- THE 103 Acting for the Non-Major
- or
- DAN 178 Technical Theatre for Dancers

IV. Dance Concentration (33 hours)

- DAN 145 Dance Practicum (3 credits) (1 credit hour for 3 quarters)
- DAN 204, 205, 206 Dance Pedagogy (3 credits)
- DAN 241, 242 Dance Composition I and II (6 credits)
- DAN 180 Music for Dancers (3 credits)
- DAN 272 Ballet II (9 credits) (9 repeatable credits)
- DAN 273, 274, 275 Modern, Jazz, and Tap Technique (9 credits)

NOTE: This is a model only. Students should plan their specific program with dance faculty or academic counselor. To complete the Ohio Transfer Module see an academic counselor.

University Parallel

Description

Graduates of the program may dance, teach, choreograph, and/or work with dance or theater productions. Behind the scenes, dancers may assist with costuming, lighting, make-up, and set design. Choreographers create new and original dance compositions which they may teach to other performers. Graduates may teach in or open private dance studios.

Type of Degree or Certificate

Associate of Arts

96 Total Credit Hours

University Parallel

Description

One of the strengths of the Sinclair program is the emphasis on public performance with an opportunity for students to perform in recitals each quarter. These performing experiences prepare the student for additional music studies or for the world of work. Students are advised to work with an academic counselor for appropriate course selection. A 20-minute solo recital is required before graduation.

Type of Degree or Certificate

Associate of Arts

103-109 Total Credit Hours

Transfer to Four Year

Graduates of this program receive an associate of arts degree in music and may choose to transfer to a four-year institution for further study. This program satisfies specific articulation agreements with Wright State University and the University of Dayton.

Music Education**

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

I. Applied Music Instrument - Major (12 hours)

MUS 168-192 (2 credit hours, repeatable credit)

II. Applied Music—Minor Instrument** (6 hours)

MUS 116, 117, 118

MUS 216, 217, 218

or

MUS 171 (1 credit hour, repeatable credit)

III. Music Theory and Sight Singing & Dictation (25 hours)

MUS 111, 112, 113

MUS 211, 212, 213

MUS 139

MUS 141, 142, 143

MUS 241, 242, 243

IV. Survey of Musical Styles (9 hours)

MUS 131, 132, 133

V. Ensemble (6 hours)

MUS 166, 194, 195, 296 (1 credit hour, repeatable credit)

VI. Vocal Diction (6 hours)*

MUS 106, 107, 108

VII. Communication (12 hours)

ENG 111, 112, 113

COM Elective***

VIII. Natural Sciences & Mathematics (15-17 hours)

One sequence with lab required:

AST 111, 112, 113

BIO 111, 112, 113

CHE 141, 142, 143

CHE 151, 152, 153

GLG 141, 142, 143 or 144

PHY 141, 142, 143

PHY 201, 202, 203

Mathematics Elective*

IX. Social Sciences* (9 hours)

X. Music Elective* (9 hours)

* See academic counselor.

** Sinclair's Music program is accredited by the National Association of Schools of Music (NASM).

Music Performance**

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

- I. **Applied Music—Major Instrument (24 hours)**
MUS 168-192 (2 credit hours, repeatable credit)
- II. **Applied Music—Minor Instrument (6 hours)**
MUS 116, 117, 118
MUS 216, 217, 218
or
MUS 171 (1 credit hour, repeatable credit)
- III. **Music Theory and Sight Singing & Dictation (25 hours)**
MUS 111, 112, 113
MUS 141, 142, 143
MUS 211, 212, 213
MUS 241, 242, 243
MUS 139
- IV. **Survey of Musical Styles (9 hours)**
MUS 131, 132, 133
- V. **Ensemble (6 hours)**
(1 credit hour, repeatable credit)
MUS 166, 194, 195, 296
- VI. **Vocal Diction (6 hours)**
(Voice majors and minors only)
MUS 106, 107, 108
- VII. **Communication (12 hours)**
ENG 111, 112, 113
COM Elective***
- VIII. **Natural Sciences & Mathematics (15*** hours)**
One sequence with lab required:
AST 111, 112, 113
BIO 111, 112, 113
CHE 141, 142, 143
CHE 151, 152, 153
GLG 141, 142, 143 or 144
PHY 141, 142, 143
PHY 201, 202, 203
Mathematics Elective*
- IX. **Social Sciences* (9 hours)**

* See academic counselor.

** Sinclair's Music program is accredited by the National Association of Schools of Music (NASM).

University Parallel

Description

One of the strengths of the Sinclair program is the emphasis on public performance with an opportunity for students to perform in recitals each quarter. These performing experiences prepare the student for additional music studies or for the world of work. Students are advised to work with an academic counselor for appropriate course selection. A 30-minute solo recital is required before graduation.

Type of Degree or Certificate

Associate of Arts

106 Total Credit Hours

Transfer to Four Year

Graduates of this program receive an associate of arts degree in music and may choose to transfer to a four-year institution for further study. This program satisfies specific articulation agreements with Wright State University and the University of Dayton.

University Parallel

Description

This comprehensive and intense degree is focused on student development and performance training. Classroom theory is applied in a multiple performance theatre season.

Type of Degree or Certificate

Associate of Arts

96 Total Credit Hours

Transfer to Four Year

This degree is designed as a university parallel program for students to transfer to four-year institutions.

Theatre Performance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

I. Ohio Transfer Module (54 credit hours)

English (9 hours)

Mathematics (3 hours)

Natural & Physical Science (12 hours)

Social & Behavioral Science (choose from at least two areas—15 hours)

Arts & Humanities: THE 105, 201, 202, 203, LIT 227

II. Computer (3 credit hours)

BIS 160 Introduction to Word, PowerPoint & Excel (3 hours)

III. Communication (3 credit hours)

COM 206 Interpersonal Communication (3 hours)

IV. Theatre CORE (9 hours)

THE 106 Stagecraft (3 hours) plus THE 107 lab

THE 198 Applied Theatre Technology (3 quarters, 1 credit per quarter—total of 3 hours)

THE 206 Script Analysis (3 credit hours)

V. Performance Concentration (27 hours)

THE 111, 112, 113 Acting I, II, III (9 hours)

THE 108 Voice & Speech for the Actor (3 hours)

THE 109 Movement for the Actor (3 hours)

THE 213 Auditions (3 hours)

DAN elective Ballet, Jazz or Tap (3 hours)

THE electives (courses not used above—maximum of 2 credits for performance practicum—6 hours)

Theatre Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

I. Ohio Transfer Module (54 credit hours)

English (9 hours)
Mathematics (3 hours)
Natural and Physical Science (12 hours)
Social and Behavioral Science (*choose from at least two areas – 15 hours*)
Arts & Humanities: THE 105, 201, 202, 203, LIT 227 (15 hours)

II. Computer (3 credit hours)

BIS 160 Introduction to Word, PowerPoint & Excel (3 hours)

III. Communication (3 credit hours)

COM 206 Interpersonal Communication (3 hours)

IV. Theatre CORE (9 hours)

THE 106 Stagecraft and THE 107 lab (3 hours)
THE 198 Applied Theatre Technology (3 quarters, 1 credit per quarter – total of 3 hours)
THE 206 Script Analysis (3 credit hours)

V. Technical Theatre Concentration (27 hours)

THE 103 Acting for the Non-major (3 hours)
THE 110 Drafting for the Theatre (3 hours)
THE 198 Applied Theatre Technology (1 credit in addition to CORE requirement)
THE 240 Stage Management (3 hours)
THE 298 Applied Theatre Technology (2 hours)
THE 220 Theatre Portfolio (3 hours)
ART electives: Choose ART 101 and 102 or ART 111 and 112 (6 hours)
THE Electives: *Choose two from the following: (6 hours)*
THE 115, Stage Lighting Technology plus THE 117, Lighting Lab (3 hours)
THE 122, Sound Fundamentals plus THE 123, Sound Lab (3 hours)
THE 125 Costume Fundamentals and THE 128 Costume Lab (3 hours)
THE 126 Make-up (3 hours)

University Parallel

Description

This comprehensive and intense degree is focused on the application of rigorous classroom theory and laboratory experience in theatrical productions.

Type of Degree or Certificate

Associate of Arts

96 Total Credit Hours

Transfer to Four Year

This degree is designed as a university parallel program for students to transfer to four-year institutions.

Career Program

Description

Recognize, understand and use the language and jargon of interior design. Discuss the history, fundamentals and basic theories of interior design. Apply critical thinking and creative problem solving skills to a variety of interior design problems. Communicate design concepts at various stages of development using the design process, drawing skills and/or appropriate software. Develop floor plans, interior views, and other relevant interior design documents using traditional and computer-based design tools. Develop professional quality presentations and demonstrate adequate written and oral communication skills. Demonstrate an understanding of the business fundamentals of interior design.

Type of Degree or Certificate

Associate of Applied Arts

99 Total Credit Hours

Career Opportunities

Interior design graduates typically pursue careers as designers or consultants in design and decorating studios, architectural firms or commercial retailers. Design work is creative, fast paced and detail oriented. Developing floor plans, selecting and coordinating floor and wall coverings, furniture and accessories, and preparing drawings, cost estimates, and contracts are common activities for interior designers.

Interior Design*

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
BIS	160	Introduction to Word, PowerPoint, & Excel	3
VIS	106	Design Basics: 2-D	3
IND	131	Interior Design I	3
ENG	111	English Composition I	3
ARC	101	Architectural Drafting	3
TOTAL			15
SECOND QUARTER			
VIS	107	Design Basics: 3-D	3
IND	132	Interior Design II	3
ENG	112	English Composition II	3
ARC	102	Architectural Detail Drafting	4
TOTAL			13
THIRD QUARTER			
VIS	109	Design Drawing	3
ETD	199	Introduction to Computer-Aided Drafting Concepts	2
IND	133	Interior Design III	3
ENG	113	English Composition III	3
ART	101	Introduction to Art	3
TOTAL			14
FOURTH QUARTER			
MAN	105	Introduction to Business	3
ART	102	Art Media	3
PSY	121	General Psychology I	3
	—	Mathematics Elective	4
TOTAL			13
FIFTH QUARTER			
IND	231	Advanced Interior Design I	4
ARC	199	Advanced 2-D CAD	2
MRK	225	Sales Fundamentals	3
PSY	122	General Psychology II	3
IND	240	History of Furniture	3
TOTAL			15
SIXTH QUARTER			
IND	134	Interior Textiles & Materials	3
IND	232	Advanced Interior Design II	4
MRK	201	Marketing I	3
SOC	111	General Sociology I	3
ART	108	Design Basics: Color	3
TOTAL			16
SEVENTH QUARTER			
IND	233	Advanced Interior Design III	4
VIS	276	Visual Communications Portfolio Development	3
COM	206	Interpersonal Communication	3
IND	—	Interior Design Elective	3
TOTAL			13

* Sinclair's Interior Design program is accredited by the National Association of Schools of Art and Design (NASAD).

Visual Communications*

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title	Credit Hours
FIRST QUARTER	
ENG 111 English Composition I	3
VIS 104 Computer Basics	3
VIS 114 Interactive Digital Theory	3
VIS 106 Design Basics: 2-D	3
VIS 100 Design Survey	3
101 VIS Tech Prep Seminar	
VIS 105 Printing Basics	3
TOTAL	18
SECOND QUARTER	
VIS 107 Design Basics: 3-D	3
VIS 108 Typography	3
VIS 146 Digital Illustration	3
ENG 131 Business Communications I	3
112 English Composition II	
VIS 147 Digital Imaging	3
ART 111 Art Drawing I	3
TOTAL	18
THIRD QUARTER	
VIS 109 Design Drawing	3
VIS 148 Digital Page Layout	3
VIS 117 Web Page Design	3
ENG 113 English Composition III	3
132 Business Communications II	
VIS 150 Screen Printing	3
115 Digital Video	
TOTAL	15
FOURTH QUARTER	
VIS 206 Design Principles I	4
VIS 236 Design Applications I	4
MAT 105 Business Mathematics	
101 Elementary Algebra	4
VIS 151 Offset Printing	
118 Web Page Design II	3
VIS 201 Digital PrePress I	3
TOTAL	18
FIFTH QUARTER	
COM 206 Interpersonal Communication	3
VIS 207 Design Principles II	4
VIS 237 Design Applications II	4
ART 101 Art Appreciation-Introduction to Art	3
VIS 116 Digital Animation	3
202 Digital PrePress II	
TOTAL	17
SIXTH QUARTER	
PSY 121 General Psychology I	3
ART 161 Photography I	4
VIS 276 Visual Communications Portfolio Development	4
VIS 278 Visual Communications Capstone	3
VIS 265 Digital Authoring	3
270 Visual Communications Internship	
MRK 201 Marketing I	
ART Elective	
Visual Communications Elective	
TOTAL	17

* Sinclair's Visual Communications program is accredited by the National Association of Schools of Art and Design (NASAD).

Career Program

Description

Visual Communications graduates typically pursue careers as graphic designers (also called commercial artists) in design studios, advertising agencies, magazine and book publishing companies, or corporate design departments. Design work is creative, fast paced and in demand by most businesses. Whether it is stationery, brochures, magazines, advertising, packaging, signage, television graphics, animation or multimedia, designers probably had a hand in it. The goal of the program is to provide state-of-the-art instruction to help students develop real-world job skills. Advanced computer skills, portfolio development and job-seeking strategies are incorporated into the curriculum.

Type of Degree or Certificate

Associate of Applied Arts

103 Total Credit Hours

Career Opportunities

Visual Communications graduates typically pursue careers as graphic designers (also called commercial artists) in corporations and private design studios, advertising agencies, newspapers, magazine and book publishers and multimedia and web page production houses. Design work is creative and fast paced. Whether it's stationery, brochures, magazines, advertising, packaging, signage, television graphics, animation or multimedia, designers usually have a hand in it.

Certificate

Description

Students completing this certificate will have an ecumenical knowledge of current church music practices. Some churches may provide scholarships or financial assistance for musicians to pursue this certificate.

Type of Degree or Certificate

Certificate

45 Total Credit Hours

Church Music

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

I. Music Theory		
MUS 111	Music Theory I	3
MUS 112	Music Theory II	3
MUS 113	Music Theory III	3
II. Sight Singing & Dictation		
MUS 141	Singing & Dictation I	1
MUS 142	Singing & Dictation II	1
MUS 143	Singing & Dictation III	1
III. History of Church Music		
MUS 148	History of Music & Worship I	3
MUS 149	History of Music & Worship II	3
MUS 150	History of Music & Worship III	3
IV. Choral Conducting		
MUS 136	Choral Conducting	2
V. Church Service Playing		
MUS 245	Church Service Playing I	2
MUS 246	Church Service Playing II	2
VI. Applied Music Practicum (organ instruction)		
MUS 299	Applied Music Practicum (Repeatable for three quarters)	12
VII. Church Music Practicum		
MUS 275	Church Music Practicum	2
VIII. Music Electives		4

Arts Administration

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
COM	206	Interpersonal Communication	3
ENG	131	Business Communications I	3
COM	285	Professional Communication	3
		or	
	225	Group Communication	
MAN	105	Introduction to Business	3
MAN	201	Introduction to Supervision	3
MAN	265	Introduction to E-Commerce	3
BIS	M41	Introduction to Excel	1
BIS	M31	Introduction to Access	1
BIS	M61	Introduction to Word	1
MRK	201	Marketing I	3
MRK	225	Sales Fundamentals	3
ART	263/	Business of Art	3
MAN	263		
FPA	278	Capstone	1
Six credit hours from the following:			6
THE	105	Introduction to Theatre I	
DAN	157	Dance Appreciation	
ART	101	Art Appreciation: Introduction to Art	
ART	231	Art of the Ancient World	
ART	232	Art of the Medieval & Renaissance Worlds	
ART	233	Art of the Modern World	
MUS	115	Music Appreciation	
Four credit hours form the following (no repeat credit):			4
MUS	194	Wind Symphony	
MUS	195	Concert Band	
THE	111	Acting I	
THE	106	Stagecraft	
DAN	172	Ballet I	
DAN	173	Modern Dance I	
DAN	174	Jazz I	
DAN	175	Tap Dance I	
ART	106	Studio Art	
ART	111	Art Drawing I	
ART	131	Sculpture I	
ART	141	Ceramic Art I	
ART	161	Photography I	
Two credit hours from the following (no repeat credit):			2
ART	270	Fine Arts Internship	
MUS	270	Music Internship	
THE	198	Applied Theatre Technology	

Short Term

Description

The certificate in Arts Administration is designed for the individual who works in the arts and needs more business acumen, or for the individual desiring a position in arts administration: theatre box office, sales or gallery worker. The certificate includes courses in business, the arts, and arts appreciation, including hands-on internships.

Type of Degree or Certificate

Short Term Certificate

43 Total Credit Hours

Short Term

Description

This certificate proves basic proficiency in freehand drawing. Students will draw with a variety of materials including charcoal, pastel and ink. Students will be able to render three-dimensional items on a two-dimensional surface, and will be able to demonstrate proficiency in value, contour and perspective. This certificate will provide students with a broad range of styles and historic sources for their work, whether a graphic designer or freelance illustrator.

Type of Degree or Certificate

Short Term Certificate

13 Total Credit Hours

Basic Drawing

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
ART	111 Art Drawing I	3
ART	112 Art Drawing II	3
	or	
VIS	109 Design Drawing	
ART	113 Art Drawing III	3
ART	121 Painting I	4
	or	
	216 Life Drawing & Anatomy I	
	or	
	211 Advanced Drawing I	
	or	
	221 Advanced Painting I	
TOTAL		<u>13</u>

FPA

Short Term

Description

The certificate ensures proficiency in the use of hand and power tools and equipment including the potter's wheel, kilns and electrical/mechanical tools. Students will learn not only study techniques, methods and processes, but also will develop concepts for three-dimensional thinking. The completion of the certificate will ensure that students have a well rounded knowledge of ceramic and sculpture techniques and application.

Type of Degree or Certificate

Short Term Certificate

31 Total Credit Hours

Career Opportunities

The short term certificate in Ceramics & Sculpture is designed for serious art students, or would-be professionals, who desire to find employment in an art studio or similar commercial venue.

Ceramics & Sculpture Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
ART	141 Ceramic Art I	4
ART	142 Ceramic Art II	4
ART	143 Ceramic Art III	4
ART	241 Advanced Ceramic Art I	4
ART	131 Sculpture I	3
ART	132 Sculpture II	4
ART	133 Sculpture III	4
ART	251 Advanced Sculpture	4
TOTAL		<u>31</u>

Dance

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
DAN	145	Dance Practicum 2x	2
DAN	178	Tech Theatre for Dancers	3
DAN	180	Music for Dancers	3
DAN	155	Dance History	3
DAN	157	Dance Appreciation	3
DAN	204	Ballet Pedagogy	1
DAN	205	Modern Dance Pedagogy	1
DAN	206	Jazz Pedagogy	1
DAN	241	Dance Composition I	3
DAN	242	Dance Composition II	3
DAN	272	Ballet II 2x	6
DAN	273	Modern Dance II	3
DAN	274	Jazz II	3
DAN	275	Tap Dance II	3
MAN	105	Introduction to Business	3
BIS	160	Introduction to Word, PowerPoint, & Excel	3
TOTAL			44

Desktop Publishing

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
VIS	104	Computer Basics	3
VIS	106	Design Basics: 2-D	3
TOTAL			6
SECOND QUARTER			
VIS	146	Digital Illustration	3
VIS	108	Typography	3
TOTAL			6
THIRD QUARTER			
VIS	147	Digital Imaging	3
VIS	148	Digital Page Layout	3
TOTAL			6

Short Term

Description

The purpose of this short term certificate is to equip dance students with the basic skills necessary to work in a dance studio or to be a good teacher/choreographer. These skills include: ballet, modern dance, jazz dance, tap dance techniques, dance composition, performance, and pedagogy. Students should meet with an academic counselor to ensure correct sequencing of courses.

Type of Degree or Certificate

Short Term Certificate

44 Total Credit Hours

FPA

Short Term

Description

The desktop publishing certificate provides an introduction to the fundamental skills, techniques and software used to create a variety of printed items, including stationery, brochures, newsletters and advertisements. The course work is designed to accommodate the needs of the novice and business professionals whose jobs include desktop publishing tasks.

Type of Degree or Certificate

Short Term Certificate

18 Total Credit Hours

Short Term

Description

The digital printing certificate provides an introduction to fundamental and advanced techniques and the software used to prepare page layouts and designs for printing. The course work includes a variety of digital prepress techniques and the use of computer hardware and software commonly used in the industry.

Type of Degree or Certificate

Short Term Certificate

30 Total Credit Hours

Career Opportunities

The course work is designed to accommodate the needs of the novice and business professionals whose jobs require these skills.

Digital Printing

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
VIS 104	Computer Basics	3
VIS 105	Printing Basics	3
VIS 108	Typography	3
TOTAL		9
SECOND QUARTER		
VIS 146	Digital Illustration	3
VIS 147	Digital Imaging	3
TOTAL		6
THIRD QUARTER		
VIS 148	Digital Page Layout	3
VIS 150	Screen Printing	3
TOTAL		6
FOURTH QUARTER		
VIS 201	Digital Prepress I	3
VIS 151	Offset Printing	3
TOTAL		6
FIFTH QUARTER		
VIS 202	Digital Prepress II	3
TOTAL		3

FPA

Short Term

Description

The Multimedia certificate program provides an introduction to the fundamentals skills, techniques and software used to create a variety of interactive components of multimedia. The course work includes digital sound, digital video development, 2-D and 3-D animations, and multimedia authoring.

Type of Degree or Certificate

Short Term Certificate

33 Total Credit Hours

Multimedia

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title		Credit Hours
FIRST QUARTER		
VIS 104	Computer Basics	3
VIS 106	Design Basics: 2-D	3
VIS 108	Typography	3
VIS 114	Interactive Digital Theory	3
TOTAL		12
SECOND QUARTER		
VIS 147	Digital Imaging	3
VIS 146	Digital Illustration	3
VIS 115	Digital Video	3
TOTAL		9
THIRD QUARTER		
VIS 117	Web Page Design	3
VIS 116	Digital Animation	3
TOTAL		6
FOURTH QUARTER		
VIS 118	Web Page Design II	3
VIS 265	Digital Authoring	3
TOTAL		6

Photographic Technology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
ART	233	Art of the Modern World	3
CHE	120	Introduction to Chemistry	4
MAT	105	Business Mathematics	4
ART	161	Photography I	4
ART	162	Photography II	4
ART	163	Photography III	4
ART	170	Non-Silver Photography	4
ART	171	Studio Photography	4
ART	175	Computer Photography I	3
ART	194	Photography Portfolio I	1
ART	265	Color Photography I	3
ART	266	Color Photography II	4
ART	294	Photography Portfolio Development II	1
TOTAL			43

Professional Communication

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
COM	201	Introduction to Mass Communication	3
COM	206	Interpersonal Communication	3
COM	211	Effective Speaking I	3
COM	212	Effective Speaking II	3
COM	215	Oral Interpretation	3
COM	225	Small Group Communication	3
COM	227	Principles of Persuasion	3
COM	230	Nonverbal Communication	3
COM	235	Principles of Interviewing	3
COM	245	Intercultural Communication	3
COM	260	Effective Video Conferencing	3
COM	285	Business & Professional Communication	3
COM	286	Public Relations Principles	3
COM	287	Effective Listening	3
COM	290	Introduction to Broadcasting	3
COM	295	Independent Study in Communication	3

Please note: A student may choose any 9 courses from the above list.

Short Term

Description

The certificate ensures proficiency in composing a good photograph in the studio or field, and developing and printing photographs in black and white and color. The students will learn studio techniques, and how to operate both manual 35 mm and digital cameras. Basic computer imaging techniques and photographic restoration will also be covered. The completion of the certificate will ensure that students have a well rounded knowledge of photographic techniques and applications.

Type of Degree or Certificate

Short Term Certificate

43 Total Credit Hours

Career Opportunities

This certificate is designed for the serious photographers or students who desire to find a job in the photo studio/photo processing industry.

FPA

Short Term

Description

Communication skills are critically important for everyone. Earning a professional communication certificate can be an important key to career success. Completion of the certificate will demonstrate to current and prospective employers that a student recognizes the importance of various communication skills and strategies in a variety of professional settings. The results of a 1998 survey by the National Association of Colleges and Employers showed clearly the importance of communication skills in the work place. When asked of employers what characteristics they seek in job candidates, interpersonal skills topped the list, with teamwork skills and communication skills followed immediately behind.

Type of Degree or Certificate

Short Term Certificate

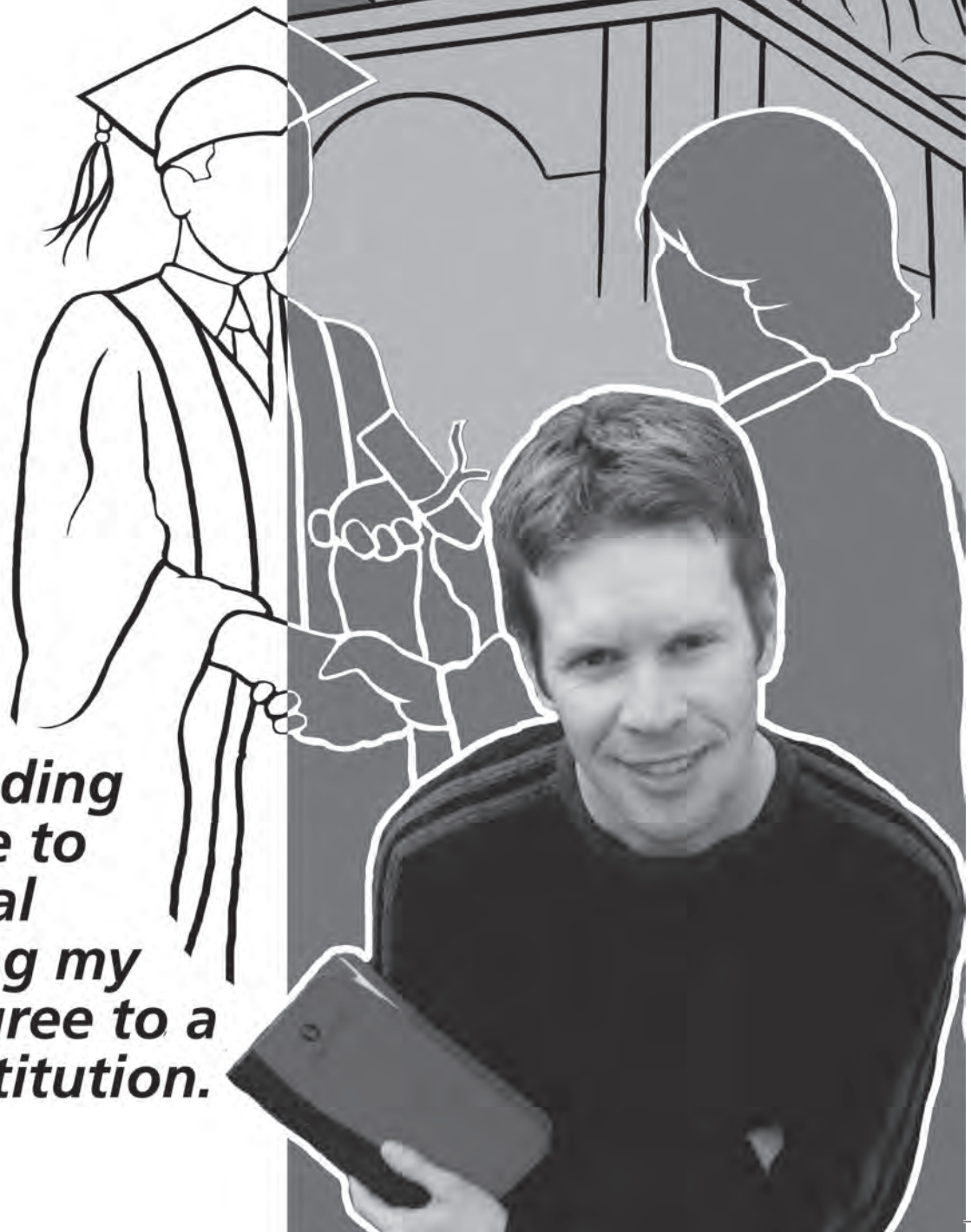
27 Total Credit Hours

**www.sinclair.edu
my.Sinclair.edu**

Liberal Arts & Sciences

Faculty and staff have been outstanding in helping me to attain my goal of transferring my associate degree to a four-year institution.

— James Hammerly



Departments

Planning the Program

Liberal Arts & Sciences programs are designed for students who wish to take the first two years of a four-year college program at Sinclair. Graduates of the Liberal Arts & Sciences program receive either the Associate of Arts (A.A.) or Associate of Sciences (A.S.) degree. The Associate of Arts curriculum contains a slightly greater emphasis on humanities, while the Associate of Science contains more mathematics and science course work. Both contain the general education core requirements for baccalaureate degrees.

The Sinclair Transfer Module (see page 270) is embedded in both the Associate of Arts and Associate of Science degrees to facilitate successful transfer of courses between Sinclair and public colleges and universities. Most courses offered in the Liberal Arts & Sciences program will parallel those offered in the freshman and sophomore years at a four-year institution.

Since students are required to take specific course sequences and electives to earn degrees in Liberal Arts & Sciences, they should plan their program of study with an academic counselor. Call (937) 512-5134 or go to Room 6121 to meet with an academic counselor.

Liberal Arts & Sciences

Articulation Agreements

Sinclair Community College and the division of Liberal Arts & Sciences have established a number of transfer agreements to assist students in transferring. Please see an academic counselor for specific transfer course information and programs.

Antioch College
Bowling Green State University
Capital University
Central State University
Indiana University East
McGregor School of Antioch University
Miami University
National University of Health Sciences
Ohio University
The Ohio State University
Park University
Raymond Walters College
University of Cincinnati
University of Dayton
University of Toledo
Urbana University
Wilberforce University
Wittenberg University
Wright State University
Xavier University

Dr. Richard Jones, Dean
(937) 512-2916, Room 6122

Dr. Eva Abdullahi
Academic Counselor
(937) 512-5134, Room 6121A

Joyce Haywood
Academic Counselor
(937) 512-5134, Room 6121B

Carrie Larger
Academic Counselor
(937) 512-5134, Room 6121D

Susan Spacht
Academic Counselor
(937) 512-5134, Room 6121C

Biology
Phyllis Williams, Chairperson
(937) 512-2747, Room 3041B

Chemistry, Geology
Michael Canestaro, Chairperson
(937) 512-2890, Room 12301B

English
Jack Bennett, Chairperson
(937) 512-3078, Room 5143

Humanities, Government, Modern Languages
Luis Gonzalez, Chairperson
(937) 512-2844, Room 3240F

Mathematics
Al Giambone, Chairperson
(937) 512-2767, Room 1341C

Physics
Art Ross, Chairperson
(937) 512-3047, Room 4230A

Psychology
Barbara Kabat, Chairperson
(937) 512-2889, Room 4143B

Sociology, Geography, Social Work
Dona Fletcher, Chairperson
(937) 512-2944, Room 12351A

Honors
Dr. Katherine Rowell, Director
(937) 512-2517, Room 10339

Phi Theta Kappa
Jamie Fries, Co-Advisor
Bill Kamil, Co-Advisor
(937) 512-2517, Room 8025

Academic Advising Office Hours

Monday-Thursday
8:00 a.m. - 7:00 p.m.

Friday
8:00 a.m. - 5:00 p.m.
(4:30 p.m. in summer)

Building 6, First Floor
(937) 512-3700

Associate of Arts

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

	Credit Hours
I. English (9 hours required)	
English (ENG)	
111 Composition I	3
112 Composition II	3
113 Composition III	3
II. Mathematics (3 hours minimum required)	
Mathematics (MAT)	
108 Math & the Modern World	3
116 College Algebra	5
117 Trigonometry	4
122 Statistics I	4
151 Introduction to Mathematical Modeling	3
201 Calculus & Analytic Geometry I	5
202 Calculus & Analytic Geometry II	5
203 Calculus & Analytic Geometry III	5
204 Calculus & Analytic Geometry IV	5
215 Differential Equations	5
216 Elements of Linear Algebra	4
218 Calculus for Business & Economics	5
III. Natural & Physical Sciences	
One sequence required with labs; 12 hours minimum required	
Astronomy (AST)	
111 Introduction to Astronomy	4
112 The Solar System	4
113 Stars, Galaxies, & Cosmology	4
Biology (BIO)	
111 General Biology I	4
112 General Biology II	4
113 General Biology III	4
171 Principles of Biology I	5
172 Principles of Biology II	5
173 Principles of Biology III	5
Chemistry (CHE)	
141 College Chemistry I	4
142 College Chemistry II	4
143 College Chemistry III	4
151 General Chemistry I	5
152 General Chemistry II	5
153 General Chemistry III	5
201 Organic Chemistry I	5
202 Organic Chemistry II	5
203 Organic Chemistry III	5

University Parallel

Description

The Associate of Arts degree program in Liberal Arts & Sciences is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs such as Education, English, Geography, History, Modern Languages, Philosophy, Political Science, Psychology, Social Work, Sociology, etc.

Type of Degree or Certificate

Associate of Arts

94 Total Credit Hours

Transfer to Four Year

The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. In addition, this degree will fulfill the requirements for the Ohio Transfer Module at other Ohio public colleges and universities.

	Credit Hours
Geology (GLG)	
141 General Geology I	4
142 General Geology II	4
143 General Geology III	4
or	
144 Geological Field Trips	4
Physics (PHY)	
100 Introduction to Physics	4
104 Sound, Light & Modern Physics	4
AST 101 Survey of Astronomy	4
141 College Physics I	4
142 College Physics II	4
143 College Physics III	4
201 General Physics I	6
202 General Physics II	6
203 General Physics III	6
IV. Social & Behavioral Sciences	
<i>15 hours required. A minimum of 9 hours from this list, plus an additional 6 hours from either this list or the elective list. Choose courses from at least two areas listed below.</i>	
Economics (ECO)	
201 Principles of Economics I	3
202 Principles of Economics II	3
203 Principles of Economics III	3
Geography (GEO)	
101 Introduction to Geography I	4
102 Introduction to Geography II	3
201 World Regional Geography I	3
202 World Regional Geography II	3
Political Science (PLS)	
101 American Federal Government I	3
102 American Federal Government II	3
103 State Government	3
104 Urban Government	3
200 Political Life, Systems & Issues	3
201 International Relations I	3
Psychology (PSY)	
119 General Psychology	5
or	
121 General Psychology I and	3
122 General Psychology II	3
208 Life Span & Human Development	5
or	
205 Child Development and	4
206 Adolescent & Adult Psychology	3
207 Psychology of Aging	3
217 Abnormal Psychology	4
223 Cognitive Psychology	4
225 Social Psychology	4
228 Psychology in the Work Place	4
242 Educational Psychology	4

		Credit Hours
Sociology (SOC)		
120	General Sociology	5
	or	
111	General Sociology I and	3
112	General Sociology II	3
145	Comparing Cultures	3
160	Social Patterns in Aging	3
205	Social Problems	4
208	The Urban Environment	3
215	Cultural Diversity	4
226	Criminology	3

V. Arts & Humanities

15 hours required. A minimum of 9 hours from this list, plus an additional 6 hours from either this list or the elective list. Choose courses from at least two areas listed below.

Art (ART)

101	Art Appreciation I	3
102	Art Appreciation II	3
125	African Art	3
231	Art of the Ancient World	3
232	Art of the Medieval & Renaissance Worlds	3
233	Art of the Modern World	3
235	History of Photography	3
236	History of Women Artists	3

Dance (DAN)

155	Dance History	3
157	Dance Appreciation	3

History (HIS)

101	U.S. History (1607-1815)	3
102	U.S. History (1815-1919)	3
103	U.S. History (1919-Present)	3
105	African-American History	4
111	Western Civilization (0-1300)	3
112	Western Civilization (1300-1815)	3
113	Western Civilization (1815-Present)	3
214	History of Southeast Asia	3
215	Survey of African History	3
216	Survey of Latin American History	3
217	Survey of East Asia	3
218	History of Ohio	3

Humanities (HUM)

125	The Human Image	3
130	Humanities & Challenge Technology	3
131	Search for Utopia	3
135	Environmental Ethics	3
255	People & Religion	3

Literature (LIT)

201	Survey of English Literature (to 1660)	3
202	Survey of English Literature (1660-1832)	3
203	Survey of English Literature (1832-Present)	3
211	Survey of American Literature I (Colonial & Early 19th Century)	3
212	Survey of American Literature II (Later 19th Century)	3
213	Survey of American Literature III (20th Century)	3

University Parallel

Associate of Arts

Continued

		Credit Hours
217	Images of Women in Literature	3
227	Introduction to Shakespeare	3
230	Great Books of the Western World	3
234	Literature of Africa, Asia, & Latin America	3
240	Children's Literature	3
Music (MUS)		
115	Music Appreciation	3
131	Survey of Musical Styles I	3
132	Survey of Musical Styles II	3
133	Survey of Musical Styles III	3
Philosophy (PHI)		
204	Great Books: Philosophy	3
205	Introduction to Philosophy	3
206	Personal Ethics	3
Religion (REL)		
111	Eastern Religions	3
112	Western Religions	3
135	American Religious Movements	3
204	Great Books: The Bible & Western Culture	3
Theatre (THE)		
105	Theatre Appreciation	3
201	History of Theatre I	3
202	History of Theatre II	3
203	History of Theatre III	3
VI. Communication (3 hours required)		
Communication (COM)		
206	Interpersonal Communication	3
211	Effective Speaking I	3
225	Small Group Communication	3
VII. Computer Competency (3 hours required)		
CIS	111 Introduction to Problem Solving & Computer Programming	4
BIS	160 Introduction to Word, PowerPoint, & Excel	3
CHE	152 General Chemistry II	5
MAT	220 Statistics II	4
PHY	220 Introduction to Computational Physics	3
VIII. Multicultural (3 hours required)*		
GEO	102 Human Geography	3
GEO	201 World Regional Geography I	3
GEO	202 World Regional Geography II	3
HUM	130 Humanity & the Challenge of Technology	3
LIT	217 Images of Women in Literature	3
LIT	234 Literature of Africa, Asia & Latin America	3
PLS	200 Political Life, Systems & Issues	3
PLS	205 Model United Nations: International Issues	3
PSY	225 Social Psychology	4
SOC	145 Comparing Cultures	3
SOC	215 Cultural Diversity	4
IX. Freshman Experience (2 hours required)		
ASE	101 LAS Freshman Experience	2

X. Electives

Students select elective courses from any required course, the electives list, or the emphasis area list to fulfill the 94 hours required for degree completion.

Associate of Arts Electives

University Parallel Associate of Arts

Continued

	Credit Hours		Credit Hours
Arts & Humanities			
ART (any course)	3	PLS (any course)	3
DAN (any course)	3	PSY (any course)	3
HIS (any course)	3	SOC 115	4
HUM (any course)	3	SOC 117	3
LIT (any course)	3	SOC 125	3
MUS (any course)	3	SOC 130	3
PHI (any course)	3	SOC 209	3
REL (any course)	3	SOC 210	3
THE (any course)	3	SOC 214	3
		SOC 216	3
		SOC 217	3
		SOC 225	3
Modern Languages			
AFR 121	3	SOC 227	3
AFR 122	3	SOC 235	3
FRE 101	4		
FRE 102	4	Other	
FRE 103	4	ACC 121	5
FRE 201	4	ACC 122	5
FRE 202	4	COM (any course)	3
FRE 203	4	FIN 215	3
GER 101	4	JOU 101	3
GER 102	4	JOU 102	3
GER 103	4	LAW 101	4
SPA 101	4	LAW 102	4
SPA 102	4	ASL 111	3
SPA 103	4	ASL 112	3
SPA 201	4	ASL 113	3
SPA 202	4	ASL 228	4
SPA 203	4	ASL 229	4
		ASL 230	4
Mathematics			
MAT 132 (A.A. only)	5	MAN 105	3
MAT 133	5	MAN 205	3
MAT 134	5	MRK 201	3
MAT 220	4	MRK 202	3
Natural & Physical Sciences			
BIO 104	3	Physical Education	
BIO 141	4	PED 200	2
BIO 142	4	PED 208	1
BIO 143	4	PED (any activity course)	1
BIO 205	4		
BIO 222	3	Note: A maximum of two hours of PED activity courses may be applied to the A.A. or A.S. degree.	
BIO 227	5	Substitutions to the electives listed above may only be made by the academic counselor by permission of the dean of Liberal Arts & Sciences.	
CHE 120	4		
CHE 121	4		
CHE 122	4		
GLG 145	4		
Social & Behavioral Sciences			
AFR 111	3		
AFR 112	3		
ECO 204	3		
GEO 204	3		

University Parallel

Description

An area of emphasis is a group of courses recommended for inclusion in the associate of arts degree program for students interested in pursuing the first two years of a program leading to a baccalaureate degree in the following areas:

African-American Studies
Creative Writing
Education
English
Geography
History
Modern Languages
Philosophy
Political Science
Psychology
Social Work
Sociology

Students interested in pursuing the first two years of a program leading to a professional degree (Pre-Law) should meet with a Liberal Arts & Sciences academic counselor to plan their program.

Completion of all courses listed in the emphasis area will lead to notation of the emphasis area on the students' degrees. While these courses have been selected based upon ease of transferability, requirements may vary with each transfer institution. Therefore, it is recommended that students meet with a Liberal Arts & Sciences academic counselor for assistance.

Type of Degree or Certificate

Associate of Arts

Associate of Arts Emphasis Areas

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

African-American Studies

AFR	111, 112	African-American Studies
HIS	105	History of Black America
HIS	106	History of Civil Rights
HIS	215	African-American History
LIT	236	African-American Literature
SOC	215	American Racial Groups
PSY	119 or (121 & 122)	General Psychology
PSY	160	African-American Psychology
SOC	120 or (111 & 112)	General Sociology

Creative Writing (English)

ENG	250	Personal Essay: Advanced Composition
ENG	255	Poetry
ENG	256	Fiction
ENG	257	Freelance
ENG	258	Advanced Fiction
ENG	259	Writing the Novel
ENG	264	Advanced Poetry Writing

Education

Early Childhood Education: Pre-Kindergarten to Grade 3, ages birth to age 8

Middle Childhood Education: Grades 4 to 9, ages 8 to 14

Adolescent to Young Adult Education: Grades 7 to 12, ages 12 to 21

Students interested in the Education Emphasis should meet with a Liberal Arts & Sciences academic counselor to plan their program based on the four-year institution to which they plan to transfer.

English

LIT	201, 202, 203	Survey of English Literature
LIT	211, 212, 213	American Literature
LIT	227 & 230	Shakespeare & Great Books

Geography

GEO	101, 102	Introduction to Geography
GEO	201, 202	World Geography
PLS	200, 201	Political Life; International Relations
ECO	216, 218	Principle of Macroeconomics, Principle of Microeconomics
SOC	120 or (111 & 112)	General Sociology

History

HIS	101, 102, 103	U.S. History
HIS	111, 112, 113	Western Civilization
<i>Choose one of the following:</i>		
HIS	105, 106, or 218	History of Black America; Ohio History
<i>Choose two among:</i>		
HIS	214, 215, 216, 217, 219	Non-Western History

Modern Languages

SPA	101, 102, 103	Elementary Spanish
SPA	201, 202, 203	Intermediate Spanish
FRE	101, 102, 103	Elementary French
FRE	201, 202, 203	Intermediate French
GER	101, 102, 103	Elementary German

Select two sequences of one language and one of another.

Philosophy/Religion

PHI	204	Great Books
PHI	205	Introduction to Philosophy
PHI	206	Personal Ethics
PHI	207	Logic
PHI	209	Business Ethics
REL	111	Eastern Religions
REL	112	Western Religions
REL	135	American Religions
REL	204	Great Books

Political Science

PLS	101, 102	Federal Government
PLS	103	State Government
PLS	104	Urban Government
PLS	200	Political Systems & Issues
PLS	201	International Relations

Psychology

PSY	119 or (121 & 122)	General Psychology
PSY	208 or (205 & 206)	Life Span Development
PSY	217	Abnormal Psychology
PSY	220	Personality Psychology
PSY	225	Social Psychology
Any other PSY course at 200 level		
BIO	171, 172, 173	Principles of Biology I, II, III recommended
One other natural & physical science course		

Social Work

PSY	119 or (121 & 122)	General Psychology
SOC	120 or (111 & 112)	General Sociology
SOC	145	Comparative Cultures
SWK	206	Social Work as a Profession
SWK	211	Basic Practice Theory I
SWK	212	Basic Practice Theory II
SWK	213	Social Welfare & Social Services

Sociology

PSY	119 or (121 & 122)	General Psychology
SOC	120 or (111 & 112)	General Sociology
SOC	145	Comparative Cultures
SOC	160	Social Patterns in Aging
SOC	205	Social Problems
SOC	215	Cultural Diversity
SOC	115	Today's Changing Family

University Parallel

Description

The Associate of Science degree program in Liberal Arts & Sciences is designed for students who are planning to transfer to a four-year college or university and pursue baccalaureate degree programs such as Biology, Chemistry, Environmental Sciences, Geology, Mathematics, Physics, Psychology and Pre-professional programs, i.e. Medicine, Dentistry, Pharmacy, etc.

Type of Degree or Certificate

Associate of Science

94 Total Credit Hours

Transfer to Four Year

The curriculum fulfills the freshman and sophomore general education requirements of most four-year colleges and universities. In addition, this degree will fulfill the requirements for the Ohio Transfer Module at other Ohio public colleges and universities.

Associate of Science

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

	Credit Hours
I. English (9 hours required)	
English (ENG)	
111 Composition I	3
112 Composition II	3
113 Composition III	3
• 29 hours of math/science course credits are required. Choose from courses listed here. Additional science courses may be applicable. See an academic counselor for more information.	
II. Mathematics (4 hours minimum required)	
Mathematics (MAT)	
116 College Algebra	5
117 Trigonometry	4
122 Statistics I	4
201 Calculus & Analytic Geometry I	5
202 Calculus & Analytic Geometry II	5
203 Calculus & Analytic Geometry III	5
204 Calculus & Analytic Geometry IV	5
215 Differential Equations	5
216 Elements of Linear Algebra	4
218 Calculus for Business & Economics	5
III. Natural & Physical Sciences	
<i>One sequence required with labs; 12 hours minimum required</i>	
Astronomy (AST)	
111 Introduction to Astronomy	4
112 The Solar System	4
113 Stars, Galaxies, & Cosmology	4
Biology (BIO)	
171 Principles of Biology I	5
172 Principles of Biology II	5
173 Principles of Biology III	5
Chemistry (CHE)	
141 College Chemistry I	4
142 College Chemistry II	4
143 College Chemistry III	4
151 General Chemistry I	5
152 General Chemistry II	5
153 General Chemistry III	5
201 Organic Chemistry I	5
202 Organic Chemistry II	5
203 Organic Chemistry III	5

	Credit Hours
Geology (GLG)	
141 General Geology I	4
142 General Geology II	4
143 General Geology III	4
or	
144 Geological Field Trips	4
Physics (PHY)	
100 Introduction to Physics	4
104 Sound, Light & Modern Physics	4
AST 101 Survey of Astronomy	4
141 College Physics I	4
142 College Physics II	4
143 College Physics III	4
201 General Physics I	6
202 General Physics II	6
203 General Physics III	6
IV. Social & Behavioral Sciences	
<i>15 hours required. A minimum of 9 hours from this list, plus an additional 6 hours from either this list or the elective list. Choose courses from at least two areas listed below.</i>	
Economics (ECO)	
216 Principles of Macroeconomics	4
218 Principles of Microeconomics	4
Geography (GEO)	
101 Introduction to Geography I	4
102 Introduction to Geography II	3
201 World Regional Geography I	3
202 World Regional Geography II	3
Political Science (PLS)	
101 American Federal Government I	3
102 American Federal Government II	3
103 State Government	3
104 Urban Government	3
201 International Relations I	3
200 Political Life, Systems & Issues	3
Psychology (PSY)	
119 General Psychology	5
or	
121 General Psychology I	3
and	
122 General Psychology II	3
208 Life Span & Human Development	5
or	
205 Child Development	4
and	
206 Adolescent & Adult Psychology	3
207 Psychology of Aging	3
217 Abnormal Psychology	4
223 Cognitive Psychology	4
225 Social Psychology	4
228 Psychology in the Work Place	4
242 Educational Psychology	4

University Parallel

Associate of Science

Continued

		Credit Hours
Sociology (SOC)		
120	General Sociology	5
	or	
111	General Sociology I and	3
112	General Sociology II	3
145	Comparing Cultures	3
160	Social Patterns in Aging	3
205	Social Problems	4
208	The Urban Environment	3
215	Cultural Diversity	4
226	Criminology	3

V. Arts & Humanities

15 hours required. A minimum of 9 hours from this list, plus an additional 6 hours from either this list or the elective list.
Choose courses from at least two areas listed below.

Art (ART)

101	Art Appreciation I	3
102	Art Appreciation II	3
125	African Art	3
231	Art of the Ancient World	3
232	Art of the Medieval & Renaissance Worlds	3
233	Art of the Modern World	3
235	History of Photography	3
236	History of Women Artists	3

Dance (DAN)

155	Dance History	3
157	Dance Appreciation	3

History (HIS)

101	U.S. History (1607-1815)	3
102	U.S. History (1815-1919)	3
103	U.S. History (1919-Present)	3
111	Western Civilization (0-1300)	3
112	Western Civilization (1300-1815)	3
113	Western Civilization (1815-Present)	3
105	African-American History	4
214	History of Southeast Asia	3
215	Survey of African History	3
216	Survey of Latin American History	3
217	Survey of East Asia	3
218	History of Ohio	3

Humanities (HUM)

125	The Human Image	3
130	Humanity & the Challenge of Technology	3
131	Search for Utopia	3
135	Environmental Ethics	3
255	People & Religion	3

Literature (LIT)

201	Survey of English Literature (to 1660)	3
202	Survey of English Literature (1660-1832)	3
203	Survey of English Literature (1832-Present)	3
211	Survey of American Literature I (Colonial & Early 19th Century)	3
212	Survey of American Literature II (Later 19th Century)	3
213	Survey of American Literature III (20th Century)	3

		Credit Hours
217	Images of Women in Literature	3
227	Introduction to Shakespeare	3
230	Great Books of the Western World	3
234	Literature of Africa, Asia, & Latin America	3
240	Childrens Literature	3
Music (MUS)		
115	Music Appreciation	3
131	Survey of Musical Styles I	3
132	Survey of Musical Styles II	3
133	Survey of Musical Styles III	3
Philosophy (PHI)		
204	Great Books: Philosophy	3
205	Introduction to Philosophy	3
206	Personal Ethics	3
Religion (REL)		
111	Eastern Religions	3
112	Western Religions	3
135	American Religious Movements	3
204	Great Books: The Bible & Western Culture	3
Theatre (THE)		
105	Theatre Appreciation	3
201	History of Theatre I	3
202	History of Theatre II	3
203	History of Theatre III	3
VI. Communication (3 hours required)		
Communication (COM)		
206	Interpersonal Communication	3
211	Effective Speaking I	3
225	Small Group Communication	3
VII. Computer Competency (3 hours required)		
CIS	111 Introduction to Problem Solving & Computer Programming	4
BIS	160 Introduction to Word, PowerPoint & Excel	4
CHE	152 General Chemistry II	5
MAT	225 Statistics II	3
PHY	220 Introduction to Computational Physics	3
VIII. Multicultural (3 hours required) *		
GEO	102 Human Geography	3
GEO	201 World Regional Geography I	3
GEO	202 World Regional Geography II	3
HUM	130 Humanity & the Challenge of Technology	3
LIT	217 Images of Women in Literature	3
LIT	234 Literature of Africa, Asia & Latin America	3
PLS	200 Political Life, Systems, & Issues	3
PLS	205 Model United Nations: International Issues	3
PSY	225 Social Psychology	4
SOC	145 Comparing Cultures	3
SOC	215 Cultural Diversity	4
IX. Freshman Experience (2 hours required)		
ASE	101 LAS Freshman Experience	2
X. Electives		

Students select elective courses from any required course, the electives list, or the emphasis area list to fulfill the 94 hours required for degree completion.

Associate of Science Electives

	Credit Hours		Credit Hours
Arts & Humanities			
ART (any course)	3		
DAN (any course)	3		
HIS (any course)	3		
HUM (any course)	3		
MUS (any course)	3		
LIT (any course)	3		
PHI (any course)	3		
REL (any course)	3		
THE (any course)	3		
Modern Languages			
AFR 121	3		
AFR 122	3		
FRE 101	4		
FRE 102	4		
FRE 103	4		
FRE 201	4		
FRE 202	4		
FRE 203	4		
GER 101	4		
GER 102	4		
GER 103	4		
SPA 101	4		
SPA 102	4		
SPA 103	4		
SPA 201	4		
SPA 202	4		
SPA 203	4		
Mathematics			
MAT 133	5		
MAT 134	5		
MAT 151	3		
MAT 220	4		
Natural & Physical Sciences			
BIO 104	3		
BIO 141	4		
BIO 142	4		
BIO 143	4		
BIO 205	5		
BIO 222	5		
BIO 227	5		
CHE 120	4		
CHE 121	4		
CHE 122	4		
GLG 145	4		
Social & Behavioral Sciences			
AFR 111	3		
AFR 112	3		
ECO 204	3		
GEO 204	3		
PLS (any course)	3		
PSY (any course)	3		
SOC 115	4		
SOC 117	3		
SOC 125	3		
SOC 130	3		
SOC 209	3		
SOC 210	3		
SOC 214	3		
SOC 216	3		
SOC 217	3		
SOC 225	3		
SOC 227	3		
SOC 235	3		
Other			
ACC 121	5		
ACC 122	5		
FIN 215	3		
COM (any)	3		
JOU 101	3		
JOU 102	3		
LAW 101	4		
LAW 102	4		
ASL 111	3		
ASL 112	3		
ASL 113	3		
ASL 228	4		
ASL 229	4		
ASL 230	4		
MAN 105	3		
MAN 205	3		
MRK 201	3		
MRK 202	3		
Physical Education			
PED 200	2		
PED 208	1		
PED (any activity course)	1		

Substitutions to the electives listed above may only be made by the academic counselor by permission of the dean of Liberal Arts & Sciences.

Associate of Science Emphasis Areas

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Biology

BIO	171, 172, 173	Principles of Biology I, II, III
CHE	151, 152, 153	General Chemistry I, II, III
CHE	201, 202, 203	Organic Chemistry I, II, III
MAT	201, 202, 203	Calculus I, II, III

Chemistry

CHE	151, 152, 153	General Chemistry I, II, III
CHE	201, 202, 203	Organic Chemistry I, II, III
PHY	201, 202, 203	General Physics I, II, III
MAT	201, 202, 203, 204	Calculus I, II, III, IV

Education

Adolescent to Young Adult Education: Grade 10 to age 21 in a math or science concentration.

Students interested in the education emphasis should meet with a Liberal Arts & Sciences academic counselor to plan their program based on the four-year institution to which they plan to transfer.

Environmental Science

BIO	171, 172, 173	Principles of Biology I, II, III
BIO	205, 225	Microbiology, Ecology
CHE	151, 152, 153	General Chemistry I, II, III
CHE	201, 202, 203	Organic Chemistry I, II, III
GLG	141, 142, 143	General Geology I, II, III
MAT	201	Calculus I
PHY	201, 202, 203	General Physics I, II, III

Geology

GLG	141, 142	General Geology I, II and General Geology III or Field Trip
GLG	143 or 144	General Geology III or Field Trip
CHE	151, 152, 153	General Chemistry I, II, III
PHY	201, 202, 203	General Physics I, II, III
MAT	201, 202, 203, 204	Calculus I, II, III, IV

Mathematics

MAT	117	Trigonometry
MAT	201, 202, 203, 204	Calculus I, II, III, IV
MAT	215	Differential Equations
MAT	216	Linear Algebra

Physics

PHY	201, 202, 203	General Physics I, II, III
PHY	220	Introduction to Computational Physics
MAT	201, 202, 203, 204	Calculus I, II, III, IV
CHE	151, 152, 153	General Chemistry I, II, III

Psychology

PSY	119 or (121 & 122)	General Psychology
PSY	208 or (205 & 206)	Life Span & Human Development
PSY	217	Abnormal Psychology
PSY	225	Social Psychology
Any other PSY course at 200 level		

University Parallel

Description

An area of emphasis is a group of courses recommended for inclusion in the associate of arts degree program for students interested in pursuing the first two years of a program leading to a baccalaureate degree in the following areas:

Biology
Chemistry
Education
Environmental Science
Geology
Mathematics
Physics
Psychology

Students interested in pursuing the first two years of a program leading to a professional degree (Pre-Chiropractic, Pre-Dentistry, Pre-Medicine, Pre-Mortuary Science, Pre-Optometry, Pre-Pharmacy, Pre-Veterinary) should meet with a Liberal Arts & Sciences academic counselor to plan their programs.

Completion of all courses listed in the emphasis area will lead to notation of the emphasis area on the students' degree. While these courses have been selected based upon ease of transferability, requirements may vary with each transfer institution. Therefore, it is recommended that students meet with a Liberal Arts & Sciences academic counselor for assistance.

Type of Degree or Certificate

Associate of Science

Career Program

Description

The Associate of Applied Science degree in Biotechnology provides a full range of courses to prepare students for entry level positions in the biotechnology field. The curriculum provides a background in historical development of biotechnology, bioethics, safety, reagent preparation, cell culture techniques, protein purification and analysis techniques, microbiology and fermentation methods, molecular biology (DNA) techniques and bioinformatics.

Type of Degree or Certificate

Career Degree

93-95 Total Credit Hours

Biotechnology

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
CHE	120	Introduction to Chemistry or Technical Chemistry I	4
CHE	131	Biotechnology & Bioethics	3
BTN	110	Laboratory Safety & Regulatory Compliance	3
BTN	120	Allied Health Mathematics	4-5
MAT	106	or College Algebra	
	116		
			TOTAL
			14-15
SECOND QUARTER			
BIO	111	General Biology I	4
BTN	115	Careers in Biotechnology	1
BTN	130	Biological Reagents Preparation	4
ENG	111	English Composition I	3
—		General Education Elective*	3
			TOTAL
			15
THIRD QUARTER			
BIO	112	General Biology II	4
BTN	140	Cell Culture	3
CHE	122	Introduction to Biochemistry	4
ENG	112	English Composition II	3
			TOTAL
			14
FOURTH QUARTER			
COM	206	Interpersonal Communication or Effective Public Speaking I	3
	211	or Small Group Communication	
BIS	160	Introduction to Word, PowerPoint, & Excel	2-3
	161	or Intermediate Word, PowerPoint, & Excel	
	162	or Advanced Word, PowerPoint, & Excel	
	172	or Integrated Solutions	
—		Humanities Elective*	3
		or Art Elective	
			TOTAL
			8-9
FIFTH QUARTER			
BIO	107	Human Biology	5
BTN	210	Protein Purification & Analysis	6
BIO	113	General Biology III	4
			TOTAL
			15
SIXTH QUARTER			
BTN	220	Microbiology & Fermentation Methods	4
BTN	230	Molecular Biology Techniques	6
BTN	295	Biotechnology Seminar	2
—		Humanities Elective*	3
		or Art Elective	
			TOTAL
			15
SEVENTH QUARTER			
BTN	240	Bioinformatics	3
—		General Education Elective	3
—		Multicultural Elective	3
—		Social/Behavioral Science Elective	3
			TOTAL
			12

*See page 80.

Family Advocate

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
SOC	111	General Sociology I	3
BIS	101	Personal Computer Keyboarding	3
	160	Introduction to Word, PowerPoint, & Excel	—
TOTAL			6
SECOND QUARTER			
SOC	112	General Sociology II	3
SWK	206	Social Work as a Profession	4
TOTAL			7
THIRD QUARTER			
SWK	211	Basic Practice Theory I	3
SOC	115	Today's Changing Family	4
TOTAL			7
FOURTH QUARTER			
SWK	212	Basic Practice Theory II	4
TOTAL			4

Social Service

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

Course & Title			Credit Hours
FIRST QUARTER			
COM	211	Effective Speaking I	3
SOC	111	General Sociology I	3
TOTAL			6
SECOND QUARTER			
COM	286	Public Relations Principles	3
SOC	205	Social Problems	4
SOC	215	Cultural Diversity	4
TOTAL			11
THIRD QUARTER			
SOC	130	Family Violence	3
SWK	206	Introduction to Social Welfare	4
MHT	140	Child & Adolescent Mental Health	3
TOTAL			10
FOURTH QUARTER			
SOC	297	Special Topics in Sociology	3
TOTAL			3

Short Term

Description

This certificate offers in-depth, competency-based, task-specific training for Head Start family specialists, family service specialists, and family workers who provide the support services needed by families to enhance the quality of family life. Courses focus on achieving proficiency in the following areas: social work core knowledge, values, skills, social work ethics and theory, interviewing and documentation; group/organization and micro level methodologies; collaboration and advocacy; understanding family dynamics, barriers to self-sufficiency, conflict resolution, cultural and social diversity issues, the relationship between social problems and institutional responses; and aid in the development of beginning computer skills.

Type of Degree or Certificate

Short Term Certificate

24 Total Credit Hours

Short Term

Description

This certificate provides the tools needed for volunteers and volunteer leaders related to non-profit organizations and human service agencies emphasizing the skills of communication, critical analysis of social problems, investigative techniques, an understanding of the bureaucratic social and legal system serving the community, and the role of the volunteer.

Type of Degree or Certificate

Short Term Certificate

30 Total Credit Hours

LAS

Description

The Transfer Module must include 54-60 credit hours of introductory courses in these areas: English Composition, Mathematics, Natural and Physical Sciences, Social and Behavioral Sciences and Arts/Humanities.

Type of Degree or Certificate

Transfer Module

54-60 Total Credit Hours

See Transfer Chapter,
page 49.

Sinclair Transfer Module

Sinclair recognizes the important connection between student success and academic preparedness. Depending on placement scores and/or equivalent college course work, students may be required to complete developmental courses before enrolling in the college level courses of this program.

	Credit Hours		Credit Hours
English Composition (9 quarter hours)			
ENG 111	(3)	GLG 142/148	(4)
ENG 112	(3)	GLG 143/149	(4)
ENG 113	(3)	GLG 144	(4)
		PHY 100/110	(4)
		PHY 104/119	(4)
		PHY 141	(4)
		PHY 142	(4)
		PHY 143	(4)
		PHY 201	(6)
		PHY 202	(6)
		PHY 203	(6)
Mathematics (minimum of 3 quarter hours)			
MAT 108	(3)	Social & Behavioral Sciences (minimum of 9 quarter hours from at least two areas)	
MAT 116	(5)	ECO 216	(4)
MAT 117	(4)	ECO 218	(4)
MAT 122	(4)	GEO 101	(4)
MAT 134	(5)	GEO 102	(3)
MAT 151	(3)	GEO 201	(3)
MAT 201	(5)	GEO 202	(3)
MAT 202	(5)	GEO 202	(3)
MAT 203	(5)	PLS 101	(3)
MAT 204	(5)	PLS 102	(3)
MAT 215	(5)	PLS 103	(3)
MAT 216	(4)	PLS 104	(3)
MAT 218	(5)	PLS 200	(3)
MAT 220	(4)	PLS 201	(3)
Natural & Physical Sciences (minimum of 12 quarter hours 3 courses from one sequence)			
AST 101	(4)	PLS 201	(3)
AST 111/117	(4)	PSY 119	(5)
AST 112/118	(4)	PSY 121	(3)
AST 113/119	(4)	PSY 122	(3)
BIO 111/117	(4)	PSY 205	(4)
BIO 112/118	(4)	PSY 206	(3)
BIO 113/119	(4)	PSY 207	(3)
BIO 141/147	(4)	PSY 208	(5)
BIO 142/148	(4)	PSY 217	(4)
BIO 143/149	(4)	PSY 223	(4)
BIO 171/177	(5)	PSY 225	(4)
BIO 172/178	(5)	PSY 228	(4)
BIO 173/179	(5)	PSY 242	(4)
BIO 205/206	(4)	SOC 111	(3)
BIO 222	(3)	SOC 112	(3)
BIO 225/226	(4)	SOC 120	(5)
BIO 235/236	(5)	SOC 145	(3)
CHE 141/147	(4)	SOC 160	(3)
CHE 142/148	(4)	SOC 205	(4)
CHE 143/149	(4)	SOC 208	(3)
CHE 151/157	(5)	SOC 215	(4)
CHE 152/158	(5)	SOC 226	(3)
CHE 153/159	(5)		
CHE 201/207	(5)		
CHE 202/208	(5)		
CHE 203/209	(5)		
GLG 141/147	(4)		

Transfer Module

Continued

See Transfer Chapter,
page 49.

Credit Hours

Arts & Humanities

(minimum of 9 quarter hours from two areas)

ART	101	(3)
ART	102	(3)
ART	125	(3)
ART	231	(3)
ART	232	(3)
ART	233	(3)
ART	235	(3)
ART	236	(3)
DAN	155	(3)
DAN	157	(3)
HIS	101	(3)
HIS	102	(3)
HIS	103	(3)
HIS	105	(4)
HIS	111	(3)
HIS	112	(3)
HIS	113	(3)
HIS	214	(3)
HIS	215	(3)
HIS	216	(3)
HIS	217	(3)
HIS	218	(3)
HUM	125	(3)
HUM	130	(3)
HUM	131	(3)
HUM	135	(3)
HUM	255	(3)
LIT	201	(3)
LIT	202	(3)
LIT	203	(3)
LIT	211	(3)
LIT	212	(3)
LIT	213	(3)
LIT	217	(3)
LIT	227	(3)
LIT	230	(3)
LIT	234	(3)
LIT	240	(3)
MUS	115	(3)
MUS	131	(3)
MUS	132	(3)
MUS	133	(3)
PHI	204	(3)
PHI	205	(3)
PHI	206	(3)
REL	111	(3)
REL	112	(3)
REL	135	(3)
REL	204	(3)
THE	105	(3)
THE	201	(3)
THE	202	(3)
THE	203	(3)

Other Approved Courses

ENG	250	(3)
COM	211	(3)

LAS

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Course Descriptions



Courses are listed alphabetically by course and then by course number followed by the credit hours each course offers. There is a brief description of each course followed by any prerequisite requirements. If there are no prerequisites listed, there are none required for the course. Lab information is usually noted. An “R” following the course title indicates the course may be repeated for additional credit.

Accounting (ACC)	Hospitality Management (HMT)
African-American Studies (AFR)	Humanities (HUM)
Allied Health (ALH)	Industrial Engineering Technology (IET)
American Sign Language (ASL)	Tooling & Manufacturing Technology (INT)
Architectural Technology (ARC)	Integrative Medical Massage Therapy (IMT)
Art (ART)	Interior Design (IND)
Arts & Sciences Education (ASE)	Japanese (JPN)
Astronomy (AST)	Journalism (JOU)
Automotive Technology (AUT)	Law (LAW)
Aviation Technology (AVT)	Law Enforcement (LEP)
Biology (BIO)	Literature (LIT)
Biotechnology (BTN)	Management (MAN)
Business Information Systems (BIS)	Management of Volunteer Programs (VOL)
Career Planning (CAP)	Marketing (MRK)
Chemistry (CHE)	Mathematics (MAT)
Chinese (CHN)	Medical Assistant Technology (MAS)
Civil Engineering Technology (CCT)	Mental Health Technology (MHT)
Communication Arts (COM)	Music (MUS)
Computer Information Systems (CIS)	Nursing (NSG)
Corrections (COR)	Occupational Therapy Assistant (OTA)
Dance (DAN)	Paralegal (PAR)
Dental Hygiene (DEH)	Philosophy (PHI)
Developmental Studies (DEV)	Physical Education (PED)
Dietetics Technology (DIT)	Physical Therapist Assistant (PTA)
Disabilities Intervention Services (DIS)	Physics (PHY)
Early Childhood Education (ECE)	Plastics & Composites (PLA)
Economics & Finance (ECO)	Political Science (PLS)
Education (EDU)	Psychology (PSY)
Electrical & Electronics Repair (EER)	Purchasing (PUR)
Electronics Engineering Technology (EET)	Quality Engineering Technology (QET)
Emergency Medical Services (EMS)	Radiologic Technology (RAT)
Engineering Technology (EGR)	Real Estate (RES)
Engineering Technology Design (ETD)	Religious Studies (REL)
English (ENG)	Respiratory Care (RET)
Entrepreneurship (ENT)	Russian (RUS)
Environmental Technology (EVT)	Safety Engineering Technology (SRM)
Experience Based Education (EBE)	Social Work (SWK)
Extended Learning (EXL)	Sociology (SOC)
Financial Management (FIN)	Spanish (SPA)
Fire Science Technology (FST)	Surgical Technology (SUT)
French (FRE)	Theatre (THE)
Geography (GEO)	Transportation Management (TRA)
Geology (GLG)	Travel & Tourism (TNT)
German (GER)	Visual Communications (VIS)
Health Information Management (HIM)	
Heating, Ventilating, Air Conditioning & Refrigeration (HVA)	
History (HIS)	

Accounting (ACC)

111 Principles of Accounting I 3 Cr. Hrs.

Fundamentals of accounting and their application to journals, ledgers, worksheets, and financial statements.

Prerequisite(s): DEV 065, DEV 075, DEV 108

112 Principles of Accounting II 3 Cr. Hrs.

Principles of accounting for inventories, depreciation, payroll, partnerships and corporations.

Prerequisite(s): ACC 111

113 Principles of Accounting III 3 Cr. Hrs.

Corporation accounting principles for long-term obligations, manufacturing, and cash flow.

Prerequisite(s): ACC 112

121 Principles of Financial Accounting 5 Cr. Hrs.

Fundamentals of financial accounting and their application to journals, ledgers, and financial statements.

Prerequisite(s): DEV 065 and DEV 084

122 Principles of Managerial Accounting 5 Cr. Hrs.

Application of managerial accounting concepts and techniques to problems in manufacturing accounting and service firms.

Prerequisite(s): ACC 121 or ACC 111 and ACC 112

125 Personal Computer Applications in Accounting 3 Cr. Hrs.

Fundamentals of personal computer applications in accounting utilizing spreadsheet software.

Prerequisite(s): ACC 122 or ACC 113 and BIS 160

201 Intermediate Accounting I 3 Cr. Hrs.

Accounting theory and practice relating to financial statement preparation and select asset accounts such as cash.

Prerequisite(s): ACC 113, ACC 115

202 Intermediate Accounting II 3 Cr. Hrs.

Accounting theory and practice relating to selected asset and liability accounts such as plant assets and current liabilities.

Prerequisite(s): ACC 201

203 Intermediate Accounting III 3 Cr. Hrs.

Accounting theory and practice relating to owner's equity, income determination and reporting, and financial reporting.

Prerequisite(s): ACC 202

210 Advanced Accounting 3 Cr. Hrs.

Accounting theory and practice relating to corporate consolidations, governmental and not-for-profit organizations and partnerships.

Prerequisite(s): ACC 202

211 Cost Accounting I 3 Cr. Hrs.

Accounting principles for job order and process cost accounting systems.

Prerequisite(s): ACC 113, ACC 115

212 Cost Accounting II 3 Cr. Hrs.

Managerial cost control through budgets, distribution costs, direct costs, and break-even analysis.

Prerequisite(s): ACC 211

216 Payroll Accounting: Theory & Practice 3 Cr. Hrs.

Payroll preparation theory and dealing with payroll law and regulations, tax compliance, control procedures and payroll specific decision making as it impacts profitability.

Prerequisite(s): ACC 111

221 Federal Taxes I 3 Cr. Hrs.

Beginning course in federal income taxation.

222 Federal Taxes II 3 Cr. Hrs.

Continuation of ACC 221 with emphasis on corporate income taxation.

Prerequisite(s): ACC 221

223 Advanced Taxation 3 Cr. Hrs.

Advanced Federal tax law concepts including installment sales, capital gains and losses, Federal excise tax, corporate tax provisions and fiduciary income tax returns.

Prerequisite(s): ACC 221 and ACC 222

225 Professional Tax Preparation 3 Cr. Hrs.

Practical Federal, state and local income tax preparation experience through service learning, including tax form completion for a variety of clients using tax software. Tax law applications and professional accounting ethics. Service learning required through the Voluntary Income Tax Assistance (VITA) Program.

Prerequisite(s): ACC 221

235 Auditing Theory & Practice 3 Cr. Hrs.

Auditing principles, standards, and procedures employed by the internal auditor and the independent public accountant.

Prerequisite(s): ACC 201

240 Microcomputer Accounting Systems 3 Cr. Hrs.

Hands-on microcomputer experience with an integrated software program.

Prerequisite(s): ACC 115, ACC 113

270 Accounting Internship R 1 - 9 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship

requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

295 Accounting Seminar 3 Cr. Hrs.

Application of accounting theory to forms and procedures of an accounting practice.

Prerequisite(s): ACC 201

297 Special Topics in ACC R 0.5 - 6 Cr. Hrs.

Provides opportunities to receive credit for special interest topics within the discipline. Brief description of topics will be given and prerequisites identified when course is offered. Some lab time outside of class may be required.

African-American Studies (AFR)

111 African-American Studies I 3 Cr. Hrs.

Origins, relevance and scope of African-American Studies, including African and African-American historical background, black male and female relationships, Afrocentricity and multiculturalism.

112 African-American Studies II 3 Cr. Hrs.

Practical exercises and simulated problems on recent advancements and expansions of African-American studies, including Black psychology, creative production, Afrocentricity, Black women studies, Blacks in science, and multicultural studies.

Prerequisite(s): AFR 111

121 Basic Swahili I 3 Cr. Hrs.

Introduction to Swahili with emphasis on developing basic listening, speaking, reading, and writing skills as well as conversation on everyday topics and familiarity with Swahili culture.

122 Basic Swahili II 3 Cr. Hrs.

Continuation of Basic Swahili I, AFR 121, incorporating more advanced work to further develop listening, speaking, reading, and writing skills, emphasizing conversation on everyday topics and familiarity with Swahili culture.

Prerequisite(s): AFR 121

297 Special Topics in African-American Studies R 1 - 6 Cr. Hrs.

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

Allied Health Technologies (AH)

101 Student Success Experience 2 Cr. Hrs.
Campus resources overview, general education introduction and skills development; diversity; learning/teaching styles; study skill; planning and goal setting.

Allied Health (ALH)

103 Introduction to Health Care Delivery 3 Cr. Hrs.

Orientation to the health care delivery system including history, economics, medical/legal issues, professionalism, ethics, and wellness concepts. The development of health care team skills including critical thinking and problem solving strategies, customer relations and multicultural health care perspectives.

104 Allied Health Informatics 2 Cr. Hrs.
Orientation to the use of technology in the health care delivery system including: hardware, software, user interfaces, telecommunications and networks, and health management information systems (HMIS). One lecture, two lab hours per week

105 Introduction to Allied Health 2 - 3 Cr. Hrs.

Orientation to the health care delivery system including history, definition, medical cost, public health, nutritional health, community dental, mental and environmental health, medical-legal, and patient rights. Also includes a brief description of Sinclair health programs. The optional credit hour will cover basic computer terminology, and its applications in health care.

106 Introduction to Basic Health Care Practice 2 Cr. Hrs.

Orientation to safe and effective basic health care practice including patient assessment and documentation, infection control, body mechanics, oxygen delivery, and environmental safety considerations. One lecture, two lab hours per week.

107 Introduction to Electrocardiography 3 Cr. Hrs.

Principles of electrocardiography including equipment operation, recording and troubleshooting, as well as fundamental principles of cardiovascular physiology and basic EKG interpretation. Two lecture, two lab hours per week.

108 Lab for ALH 107
Laboratory must be taken with ALH 107.

111 Clinical Phlebotomy 3 Cr. Hrs.

Introduction to the fundamental and clinical methods and practices of phlebotomy, including basic hematology, venipuncture and microcollection techniques, along with routine processing and special testing procedures. Two lecture, two lab hours per week.

112 Lab for ALH 111
Laboratory must be taken with ALH 111.

113 Venipuncture for Health Care Providers 1 Cr. Hr.

Introduction to the fundamental clinical methods and practices of phlebotomy, including basic hematology, venipuncture techniques, routine processing, and special testing procedures. Two lab hours per week.

Prerequisite(s): BIO 107 or BIO 131 or BIO 141

114 Specialized Phlebotomy 1 Cr. Hr.

Clinical methods and practices of phlebotomy, including peripheral IV therapy, microcollection techniques, and special testing procedures. Two lab hours per week.

Prerequisite(s): ALH 113

120 Nurse Aide Training 6 Cr. Hrs.

Seventy-eight clock hours of nurse aide training and competency evaluation required by the State of Ohio to be eligible to take the state certification test. Nursing related services for patients or residents in a long-term care facility. Five lecture, one lab, two and one-half clinical hours per week.

Prerequisite(s): DEV 065 and DEV 075 and DEV 085

121 Allied Health Management 3 Cr. Hrs.

The basic concepts of supervision encountered in hospitals and other health care agencies for those aspiring toward first-line supervision.

122 Pharmacy Technician I 5 Cr. Hrs.

Scope of pharmacy practice including legal aspects of drug dispensing and specific role of pharmacy technicians. Scientific terminology and dosage calculations essential for pharmacy technicians.

123 Pharmacy Technician II 5 Cr. Hrs.

Scope of pharmacy practice including handling of infectious and hazardous waste, interpersonal skills, and beginning pharmacology and dose calculations.

Prerequisite(s): ALH 122

124 Pharmacy Technician III 5 Cr. Hrs.

Scope of pharmacy practice including sterile compounding, non-sterile compounding, inventory control, beginning pharmacology, and pharmaceutical calculations. On site clinical experiences in all pharmacy practices. Three lecture, two clinical hours per week.

Prerequisite(s): ALH 123, approval of division counselor

125 Basics of Activities Programming 3 Cr. Hrs.

First of a series of three courses following the 90 Hour National Certification Council for Activity Professionals (NCCAP) guidelines. Activity planning in long-term care facilities; needs assessment, treatment modalities, professional role, documentation. Certificate awarded for completion of 36-hour basic activity course.

130 Electrocardiography for the Health Care Provider R 1 Cr. Hr.

Principles of electrocardiography including equipment operation, recording and troubleshooting. Two lab hours per week.

Prerequisite(s): BIO 107 or equivalent

131 Patient Care Assistant 6 Cr. Hrs.

Seventy clock hours of patient care assistant training, evaluation and clinical experience. Includes the role, job description, legal/ethical issues, personal care and treatments performed by the patient care assistant in an acute, or sub-acute health care facility. Three lecture, two lab, six clinical hours per week.

Prerequisite(s): ALH 120 or state tested nurse aide certificate

132 Home Health Aide 3 Cr. Hrs.

Forty clock hours of home health aide training to prepare the student to provide client care in a home setting. Theory content will include the role, job description, legal/ethical issues, community resources, growth and development, personal care and treatments performed by the nurse aide in a home setting. Assessment techniques will emphasize the environment, family and client. Practicum experience includes home visits and environmental assessments. Two lecture, three clinical hours per week.

Prerequisite(s): ALH 120 or state tested nurse aide certificate

133 Pediatric Patient Care Assistant 6 Cr. Hrs.

Seventy-five clock hours of pediatric patient care assistant training, evaluation and clinical experience. Includes the role, job description, legal/ethical issues, personal care and treatments performed by the patient care assistant in an acute care pediatric health care setting or facility. Thirty-seven and one-half hours lecture / lab and thirty-seven and one-half hours of clinical practice in an acute care pediatric health care setting. Four lecture, one-half lab, four clinical hours per week.

Prerequisite(s): ALH 120 or state tested nurse aide certificate and DEV 065, DEV 075, DEV 085

135 Administration of Activities Programming 3 Cr. Hrs.

Skills and knowledge required for directing activity programs in long-term care facilities: licensure regulations, managing difficult clients, quality assurance issues, volunteer management, community resources. Three lecture hours per week.

Prerequisite(s): ALH 125

140 Basic Life Support Training 0.5 - 1 Cr. Hr.

Theory and techniques of Basic Life Support as established by the American Heart Association. One-half lecture, one-half lab hours per week.

Prerequisite(s): Current CPR card required for 0.5 cr. hr. sections

141 Emergency Cardiac Care (ACLS) 2 Cr. Hrs.

Management of cardiovascular emergencies, including the American Heart Association's curriculum in Advanced Cardiac Life Support. One lecture and four lab hours per week for seven weeks.

Prerequisite(s): Open only to ALH students in their final quarter of training, or licensed health care professions and completion of ALH 140 or current BLS certification at health care provider level. Approval of chairperson

142 Fundamentals of Disease Processes 4 Cr. Hrs.

Pathological changes associated with the most commonly occurring diseases of each body system. Correlates changes with patient's response, diagnostic studies, and treatment modalities. Three lecture, two lab hours per week.

Prerequisite(s): BIO 107, BIO 162, BIO 143 or BIO 122

144 American Heart Association Heartsaver FACTS R 0.5 - 1 Cr. Hr.

First aid and CPR are presented in an easy to understand, short format. Students with little or no medical background can learn how to control bleeding, start a stopped heart, and save a life.

146 Self-care for the Allied Health Professional 2 Cr. Hrs.

A group experience which provides information and techniques to assist health care professionals maximize personal and professional well being in their chosen profession. Topics include life balance, recognition of professional crises, signs and symptoms of emotional, physical, and intellectual bankruptcy, and self-care plan.

147 History of American Health Care 3 Cr. Hrs.

Historical development of the American health care system from colonial times to present. How wars and other sociological events affected health care practices, the emergence of allied health workers, reforms and transformation and the evolution of changes which led to our current health care system.

148 Health Care Law & Ethics 2 Cr. Hrs.

Overview of how medical law and ethics impact the clinical practices of allied health professionals. Ethical theories and models, principles of beneficence and non-maleficence, patient autonomy, and informed consent, confidentiality, ethics of diversity, risk management, common law, the tort of negligence and legal doctrines.

155 Issues in Activity Programming 3 Cr. Hrs.

Mental health issues, medications, ethics, third party payer and regulatory requirements and work place violence in long-term care facilities. Final course in sequence to complete 90-hour certification as determined by the National Association of Activity Professionals.

Prerequisite(s): ALH 125 and ALH 135

160 Learning Communities for Health Care Professionals 1 Cr. Hr.

Learning communities natural to Allied Health Technologies will be used to develop an understanding of individual learning styles and the learning methods which facilitate success within a health care environment.

201 Survey of Drug Therapy 2 Cr. Hrs.

Overview of the conventional drug classes presenting only the more commonly prescribed preparations primarily emphasizing common effects and indications for use.

Prerequisite(s): BIO 107 or BIO 122

202 Alzheimer's Disease: Understanding & Management 3 Cr. Hrs.

Alzheimer's Disease: In-depth look at disease process, diagnosis process, communication techniques, management of activities of daily living and behavior, developing activity programs, working with families/family impact, evaluating community resources.

203 Health Care Wellness & Promotion 2 Cr. Hrs.

Developing health behaviors and behavioral change using a holistic, multi-disciplinary approach.

Prerequisite(s): Signature of IMT coordinator

210 Introduction to Community Health Advocacy 4 Cr. Hrs.

Concepts, information, and skills related to the role and responsibilities of a Community Health Advocate. Emphasis on elements of working in community based settings; characteristics of health models and plans; impact of culture and socioeconomic status on individual's health, communication; barriers to health care services; health care needs across the life span; and community resources.

219 General Pharmacology 3 Cr. Hrs.

General principles of drug absorption, distribution, metabolism, actions and effects presented according to conventional drug classification with emphasis on the prototype of each class; primarily intended for students in health professions, but may be of interest to those majoring in biological sciences.

Prerequisite(s): BIO 143 or BIO 211 or equivalent

220 Pathophysiology 4 Cr. Hrs.

Study of human disease using a system approach emphasizing abnormal physiological processes that result in the signs and symptoms of each disorder.

Prerequisite(s): BIO 107 or BIO 211 or BIO 143

230 Quality Management in Health Care 1 Cr. Hr.

Continuous quality improvement (CQI) techniques are used to analyze and improve health care practice in the current competitive and regulatory environment. Focus is on practical application of CQI processes and tools.

278 Supervisory Applications in Health Care 3 Cr. Hrs.

Assessment of achievement by Allied Health Management certificate students in attaining program outcomes by completing a project demonstrating principles and practices of supervisory management.

Prerequisite(s): ALH 230 and MAN 237 and MAN 232 and MAN 231 and MAN 230

297 Special Topics in Allied Health R 1 - 6 Cr. Hrs.

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

M25 Intravenous Therapy 1 Cr. Hr.

Multi-skilling module designed to provide the experienced health care provider with the knowledge and skills to competently insert an intravenous (I.V.) line, maintain it, administer fluids and medications, and discontinue the line. Identifying and troubleshooting common complications of I.V. therapy will be discussed. A clinical experience is incorporated within the module requirements.

Prerequisite(s): RET 224

Co-requisite: ALH M26

M26 Pharmacology for Intravenous Therapy 1 Cr. Hr.

Provides experienced health care providers with the knowledge and skills to competently administer cardiopulmonary drugs to adults and children via intravenous (I.V.) access. In-depth discussions of cardiopulmonary pharmacology, drug incompatibilities, and advanced I.V. techniques such as piggybacks and I.V. push.

Co-requisite: ALH M25 and restricted to RET majors

Architectural Technology (ARC)

101 Architectural Drafting 3 Cr. Hrs.

Develop proficiency with manual drafting instruments and skill in lettering and drawing techniques, architectural problem solving by using orthographic, isometric and oblique pictorial techniques. Two lecture, two lab hours per week.

102 Architectural Detail Drafting 4 Cr. Hrs.

Manual drafting of architectural sections, stair details, door and window details. Standard representation of the materials used in wood frame and light construction buildings. Two lecture, four lab hours per week.

Prerequisite(s): ARC 101

103 3-D Design & Architectural Modeling 3 Cr. Hrs.

Three-dimensional architectural design, applying principles of axonometric projections, perspectives and model building. Rendering of 3-D architectural drawings with the use of AutoCAD applications. Two lecture, two lab hours per week.

Prerequisite(s): ARC 199

105 Construction Materials & Methods 5 Cr. Hrs.

Construction materials origin, development use. Methods of construction for buildings and heavy and highway projects. Emphasis on processes and techniques. Understanding of blueprint reading of the architectural drawings. Three lecture, four lab hours per week.

107 Architectural Building Codes 3 Cr. Hrs.

Building permit process and definition of buildings as described in the Ohio Basic Building Code and local one, two and three family codes. Emphasis on use groups, construction classification, exit requirements and fire resistance requirements. Develop graphics of proper code assemblies of wall/roof/floor materials. Identify and apply minimum materials standards to construction standards and develop installation details. Two lecture, two lab hours per week.

116 Architectural History & Preservation 3 Cr. Hrs.

Architectural achievements from the ancient world, Asia and America. Practice with preservation techniques in a laboratory environment. Two lecture, two lab hours per week.

117 Architectural Restoration & Rehabilitation 3 Cr. Hrs.

Demonstration of the best use of a Dayton area vacated historic building, involving field measuring, investigation of zoning and building codes and cost estimating. Verbal and graphic presentation of project.

Two lecture, two lab hours per week.

Prerequisite(s): ARC 116

135 Architecture Design I 2 Cr. Hrs.

Design fundamentals for architects emphasizing the design process. Projects investigate 2-D and 3-D relationships, form, function and ornament. One lecture, two lab hours per week.

Prerequisite(s): ARC 101 and ARC 102

138 Architectural Blueprint Reading 3 Cr. Hrs.

Basic techniques for reading and interpreting construction plans and specifications, both residential and commercial. Includes all major building uses and types of construction as defined by the building code.

139 Mechanical Systems Blueprint Reading 2 Cr. Hrs.

Reading blueprints of commercial buildings, emphasizing plumbing, electrical, HVAC, and fire protection systems. One lecture, two lab hours per week.

199 Advanced 2-D CAD 2 Cr. Hrs.

Study and application of advanced drawing using computer graphic systems. Major emphasis on 2-D commands and page layout. One lecture, two lab hours per week.

Prerequisite(s): DRT 198 and ARC 101 or ARC 101 and ETD 199 or ARC 138 and ETD 199

211 Building Systems Design 3 Cr. Hrs.

Basic drafting and blueprint reading of building systems and materials applicable to commercial construction; plumbing, HVAC, electrical systems components, acoustics, and lighting design. Assignments that reflect the current zoning code, the basic building code requirements for fire resistance ratings, means of egress, accessibility and plumbing code requirements. Two lecture, two lab hours per week.

Prerequisite(s): ARC 105 and ARC 107 and ARC 240 and PHY 131

220 Architectural History & Analysis, Ancient through Medieval 3 Cr. Hrs.

Study of architecture history including ancient civilizations, Greek, Roman, Islamic, Byzantine, Gothic, Romanesque.

221 Architectural History & Analysis, Renaissance to Present 3 Cr. Hrs.

Architecture history including Renaissance, Baroque, 18th and 19th centuries modern and post-modern.

240 Architectural Design Studio II: Structure 4 Cr. Hrs.

First of a two-course sequence using computers for architectural drafting incorporating architectural file structure, manipulation of architectural symbols, menu commands, and text conventions to generate architectural plans. Two lecture, four lab hours per week.

Prerequisite(s): ARC 135 and ARC 199

241 Architectural Design Studio III: Construction Documents 4 Cr. Hrs.

Design studio for a multi-story commercial structure. Students will develop and document their own design and produce a set of construction documents for the project. Two lecture, four lab hours per week.

Prerequisite(s): ARC 240

270 Architectural Technology Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

278 Architectural Technology Capstone 5 Cr. Hrs.

Assessment of achievement by Architectural Technology students in attaining program outcomes by completing a project demonstrating principles and practices of the major. Two lecture, six lab hours per week.

Prerequisite(s): ARC 211 and ARC 241 and MET 207 or ARC 211 and ARC 241 and ETD 222

297 Special Topics in Architectural Technology R 1 - 6 Cr. Hrs.

Varied content offerings of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom/seminar setting or in a non-traditional format such as television, videotapes, etc.

Art (ART)

101 Art Appreciation: Introduction to Art 3 Cr. Hrs.

Emphasis on the language of art, exposure to many different art forms and formulative ideas about what is viewed.

102 Art Appreciation: Art Media 3 Cr. Hrs.

Exploration of art through specific media including painting, sculpture, and architecture. Analysis and evaluation through class discussion and written assignments.

106 Fine Art Sampler 4 Cr. Hrs.

Creativity enhancement for the non-art major. Studio experience in drawing, design fundamentals and three-dimensional processes, including clay. Two lecture, four lab hours per week.

107 Beginning Photoshop 3 Cr. Hrs.

An introductory course in the Photoshop imaging program. Basic introduction to scanning, capturing, and altering images for the art major or non-art major.

108 Design Basics: Color 3 Cr. Hrs.

Color theory applied to utilizing design principles and color psychology emphasizing the Josef Albers color theories. Two lecture, four lab hours per week.

109 Elements of Composition 3 Cr. Hrs.

The study of composition and visual elements in a studio setting with emphasis on hands-on learning. Two lecture, four lab hours per week.

111 Art Drawing I 3 Cr. Hrs.

Studio drawing develops visual skills relative to the drawing process, with emphasis on traditional as well as contemporary problems on representation and composition. Two lecture, four lab hours per week.

112 Art Drawing II 3 Cr. Hrs.

Traditional as well as contemporary approaches to mixed media drawing with an emphasis on ink; still life objects and the human form as subjects for exploration. Two lecture, four lab hours per week.

Prerequisite(s): ART 111

113 Art Drawing III 3 Cr. Hrs.

Foundation drawing emphasizing color theory through the use of color drawing media. Two lecture, four lab hours per week.

Prerequisite(s): ART 112 or ARV 109 or VIS 109

121 Painting I 4 Cr. Hrs.

Studio painting, basic color principles with emphasis on color, form, and space in compositional design. Two lecture, four lab hours per week.

Prerequisite(s): ART 111

122 Painting II 4 Cr. Hrs.

Personal expression with instruction in classical as well as modern techniques; complex problems in color and composition. Two lecture, four lab hours per week.

Prerequisite(s): ART 121

123 Painting III 4 Cr. Hrs.

Contemporary areas relative to medium and technique; the painting process as a means of communication; integration of 20th century concepts. Two lecture, four lab hours per week.

Prerequisite(s): ART 122

125 African Art 3 Cr. Hrs.

Introduction to symbolic and aesthetic elements of African art and its influence on modern art styles.

131 Sculpture I 3 Cr. Hrs.

First of a three-course sequence; introducing methods of sculpture with clay, paper, and other materials for constructing three-dimensional art work. Two lecture, four lab hours per week.

132 Sculpture II 4 Cr. Hrs.

Increasingly complex visual problems using more sophisticated surface treatments; design problems using the figure; doing an architectural piece in modular units. Includes woodworking shop projects. Two lecture, four lab hours per week.

Prerequisite(s): ART 131

133 Sculpture III 4 Cr. Hrs.

Personal development and expression of style; participation in critiques and discussion; projects involve integration of materials and an environmental piece. Two lecture, four lab hours per week.

Prerequisite(s): ART 132

136 Introduction to Virtual Sculpture 3 Cr. Hrs.

The study of sculpture using NURBS (non-uniform rational B-splines) modeling. Emphasis on translating forms curves surfaces and solids into accurately modeled sculptures on the computer.

141 Ceramic Art I 4 Cr. Hrs.

Materials and processes of ceramic art for the beginning student; hand building and glazing demonstrated through a variety of functional and sculptural projects. Two lecture, four lab hours per week.

142 Ceramic Art II 4 Cr. Hrs.

Introduction of the potter's wheel, with an emphasis on functional pottery; experimentation with various glazing techniques. Two lecture, four lab hours per week.

Prerequisite(s): ART 141

143 Ceramic Art III 4 Cr. Hrs.

Focus on personal development and expression in pursuing individual projects; contemporary issues in clay. Two lecture, four lab hours per day.

Prerequisite(s): ART 142

146 Video Production 4 Cr. Hrs.

Mechanics and techniques of video camera operation, including editing with emphasis on the planning needed for translating this electronic media format into an art form through a series of assignments. Two lecture, four lab hours per week.

151 Art as Therapy I 3 Cr. Hrs.

Art in the therapeutic process utilizing exploration of art media, basic art therapy techniques, and art related diagnostic tools. (Also offered as MHT 151; students may enroll in either course but not both.)

152 Art as Therapy II 3 Cr. Hrs.

Clinical art therapy experiences with varied populations; development of professional observation, assessment, and motivational skills. (Also offered as MHT 151; students may enroll in either course but not both.)

Prerequisite(s): ART 151

161 Photography I 4 Cr. Hrs.

An introduction to the art and technique of black and white photography. Photographic shooting, processing, and printing are stressed. Students to supply their own adjustable camera (35mm or 120), film and print paper. Two lecture, four lab hours per week.

162 Photography II 4 Cr. Hrs.

Intermediate course in black and white photography. Further introduction and application of the tools and techniques of the photographic art. Students to supply own adjustable camera (35mm or 120), film and print paper, retouching supplies, and photo mounting supplies. Two lecture, four lab hours per week.

Prerequisite(s): ARV 161 or ART 161

163 Photography III 4 Cr. Hrs.

Advanced photographic techniques. Specialized darkroom techniques, special purpose films and processes are explored. Students to supply own adjustable camera (35mm or 120 or 4x5), film and print paper, retouching supplies, and dry mounting agents. Two lecture, four lab hours per week.

Prerequisite(s): ARV 162 or ART 162

164 Photo Restoration 3 Cr. Hrs.

The Photo Restoration course is designed for students in the Photographic Technology certificate program. In this course students will learn manual and computerized methods of restoring photographs.

Prerequisite(s): ART 161 or ARV 161

170 Non-Silver Photography 4 Cr. Hrs.

Principle and theories of non-silver chemical processes used for print production including gum, cyanotype, and Van Dyke Brown printing. Two lecture, four lab hours per week.

Prerequisite(s): ARV 161 or ART 170

171 Studio Photography 4 Cr. Hrs.

Mechanics and aesthetics of photography in a studio environment covering a range of subjects and emphasizing lighting techniques and equipment as well as use of all camera formats. Two lecture, four lab hours per week.

Prerequisite(s): ARV 161 or ART 161

175 Computer Photography I 3 Cr. Hrs.

Techniques for transforming photographic images through use of computers and digital cameras. Use of a computer to create high tech fine art images.

Prerequisite(s): ART 161

176 Computer Photography II 3 Cr. Hrs.

Advanced computer software to create fine art in the digital medium. Advanced Photoshop techniques including layers, color correction, masking and special effects.

Prerequisite(s): ART 175

181 Fiber Fabric Design 4 Cr. Hrs.

Traditional needlework in original and creative art forms with emphasis on fashion design, clothing embellishment, and accessories with a history of various needle arts. Students explore the use of new and unusual materials. Two lecture, four lab hours per week.

194 Photography Portfolio I R 1 Cr. Hr.

One-to-one instruction regarding the student's photography portfolio, establishing groundwork for remaining courses. Instructor meets once each week to review the student's portfolio and its progression. Suggestions for direction and improvement will be given in regard to image content, critical theory and final presentation. This required course should be taken after completing the first four photography courses, halfway through the program. Students failing to pass the course will be dropped from the program. Failure to take and pass this course will make the student ineligible for the Photography certificate. *Prerequisite(s): 12 credit hours in the photography certificate program: ART 161, 162, 163, 164, 170, 171, 175, 265, declared Photography certificate major*

195 Portfolio Development in Fine Arts 1 Cr. Hr.

Mechanics and techniques of preparing slides of art work; matting and framing of art work; artist resume writing and overall presentation needed for development of portfolio. *Prerequisite(s): 45 total hours earned, 21 of which must be in ART*

205 Professional Problems in Art 3 Cr. Hrs.

Information to help the visual artist identify challenges of making a living as an artist. Includes legal aspects and copyright laws.

211 Advanced Drawing I 3 Cr. Hrs.

Personal expression developed through a variety of 2-D media, cubistic techniques, gestural and figure studies. *Prerequisite(s): ART 113*

212 Advanced Drawing II 3 Cr. Hrs.

Definition of a personal expression through the drawing process; traditional and modern approaches to drawing the figure, still life, and other contemporary subjects. *Prerequisite(s): ART 211*

213 Advanced Drawing III 3 Cr. Hrs.

Emphasis on the technical process and the language of drawing; a variety of media and techniques focusing on personal expression. *Prerequisite(s): ART 212*

216 Life Drawing & Anatomy I 4 Cr. Hrs.

Figure drawing with a foundation in anatomical study. Emphasis on proportion as well as design. Two lecture, four lab hours per week. *Prerequisite(s): ART 111*

217 Life Drawing & Anatomy II 4 Cr. Hrs.

Advanced with a foundation in anatomical study. Continued development of design and proportion with an application towards mood and content. One lecture, four lab hours per week. *Prerequisite(s): ART 216*

218 Life Drawing & Anatomy III 4 Cr. Hrs.

Advanced figure drawing with a foundation in anatomical study. Emphasis on proportion and scale. Development of content and design through collage aesthetic. Two lecture, four lab hours per week. *Prerequisite(s): ART 217*

221 Advanced Painting I 4 Cr. Hrs.

Creative possibilities through color and imagery. Especially designed for Fine Art University Parallel majors. Two lecture, four lab hours per week. *Prerequisite(s): ART 123*

222 Advanced Painting II 4 Cr. Hrs.

The visual phenomenon of color as a communication vehicle; develops independence in the studio process; begin work for exhibition. Two lecture, four lab hours per week. *Prerequisite(s): ART 221*

223 Advanced Painting III 4 Cr. Hrs.

Develops independence and freedom of expression; critique and discussion of new trends; research and analysis of color, form imagery, and design. Two lecture, four lab hours per week. *Prerequisite(s): ART 222*

231 Art of the Ancient World 3 Cr. Hrs.

Art history from early cave paintings to the period of Byzantine and Islamic Art.

232 Art of the Medieval & Renaissance Worlds 3 Cr. Hrs.

Art history of the early Medieval period through the High Renaissance period.

233 Art of the Modern World 3 Cr. Hrs.

Art history from the periods of Mannerism and Late Renaissance to the Twentieth Century.

235 History of Photography 3 Cr. Hrs.

Historical survey of photography as an art form from its beginnings in the 1830's until the present day; developments in photographic processes, artistic trends, and study of major photographic artists.

236 History of Women Artists 3 Cr. Hrs.

A history of women artists from the Middle Ages to the present day, with emphasis on the history of style, and on women's historical roles.

237 American Art History 3 Cr. Hrs.

An overview of the history of art in the United States, placed within the larger historical context.

241 Advanced Ceramic Art I 4 Cr. Hrs.

Introducing porcelain clay and glazing techniques; development of personal style, extending to experimentation in low fire clay and glazes. Two lecture, four lab hours per week. *Prerequisite(s): ART 143*

242 Advanced Ceramic Art II 4 Cr. Hrs.

Exploration of personal style, extending to experimentation in low fire clay and glazes. Two lecture, four lab hours per week. *Prerequisite(s): ART 241*

243 Advanced Ceramic Art III 4 Cr. Hrs.

Specialization and research in one area, presentation of research, development of personal style. Two lecture, four lab hours per week. *Prerequisite(s): ART 242*

251 Advanced Sculpture 4 Cr. Hrs.

Selection of an area of research with formulation of goals that develop personal expression and style. Two lecture, four lab hours per week. *Prerequisite(s): ART 133*

261 Watercolor 4 Cr. Hrs.

Technical variety and experimentation with selected design problems; for both the beginning and experienced watercolorist. Two lecture, four lab hours per week. *Prerequisite(s): ART 111*

263 The Business of Art: A Historical Perspective 3 Cr. Hrs.

An interdisciplinary course which tracks the historic evolution of the seemingly unnatural partnership between business and art. The course concentrates specifically on the creation, marketing and acquisition of art through the ages with emphasis on current day trends.

264 Woodcut Printmaking 4 Cr. Hrs.

Introductory printmaking course using wood cutting tools and printing editions by hand; overview of the history of woodcuts. Two lecture, four lab hours per week. *Prerequisite(s): ART 111*

265 Color Photography I 3 Cr. Hrs.

An introduction to the technique of color photography and processing. The color negative process will be explored. Student to supply own adjustable camera (35mm or 120), films and paper, polarizing filter and specified conversion filters. *Prerequisite(s): ARV 161 or ART 261*

266 Color Photography II 4 Cr. Hrs.

An intermediate course in color photography. Various camera and darkroom techniques will be employed to enhance the print. Student to supply own adjustable camera (35mm or 120), film and paper. Two lecture, four lab hours per week.

Prerequisite(s): ART 265

267 Color Photography III 4 Cr. Hrs.

The advanced photographic course. Creative darkroom and camera techniques will be explored. Portfolio to be produced. Student to supply own adjustable camera (35mm or 120), film and paper. Two lecture, four lab hours per week.

Prerequisite(s): ART 265

268 Collage 4 Cr. Hrs.

Basic course in the techniques of collage or cut paper; design and compositional studies using different materials to encourage experimentation. Two lecture, four lab hours per week.

Prerequisite(s): ART 111 or ART 106

269 Printmaking 4 Cr. Hrs.

Examines the philosophy, history, and techniques of multiple image preparation as well as woodcut and intaglio processes. Two lecture, four lab hours per week.

Prerequisite(s): ART 111

270 Fine Arts Internship R 1 - 12 Cr. Hrs.

Practicum providing student with experience in organizing and hanging of art exhibits, assisting in studios, understanding slid cataloging, or doing a specific project with the permission of the chairperson.

278 Fine & Performing Arts Capstone R 1 Cr. Hr.

A course designed to allow students to demonstrate proficiency in the program learning outcomes of the Arts Administration certificate. Two lab hours per week.

Prerequisite(s): Restricted to Arts Administration certificate majors; 20 hours of certificate complete

294 Photography Portfolio Development II 1 Cr. Hr.

One-on-one instruction regarding the student's final graduating photography portfolio. Instructor will meet with the student during final quarter of study to help the student compose his or her final graduating portfolio. Student may repeat course up to three times to achieve a passing grade. Failure to satisfactorily complete this course will make the student ineligible for the Photographic Technology short-term technical certificate.

Prerequisite(s): 28 hours of Photography courses and/or taken during final quarter of study. Photography certificate major

295 Pre-graduation Exhibition 1 Cr. Hr.

Graduating Fine Arts majors will have a formal gallery exhibition of their work to be followed by an open oral discussion with a panel of three faculty members to evaluate presentation and techniques within the work. One-fourth of work shown will be created specifically for exhibition. Student will be responsible for presentation and installation.

297 Special Topics in Art R 0.5 - 6 Cr. Hrs.

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service/learning courses/activities, including special interest topics, workshops, or customized training.

Arts & Science Education (ASE)

101 The Freshman Experience 2 Cr. Hrs.

Team taught interdisciplinary course integrating various learning strategies to familiarize students with the competencies and skills necessary to achieve Liberal Arts & Sciences degree program outcomes. This course will connect students to all levels of student support services designed to improve academic success. Required for all Liberal Arts & Sciences A.A. and A.S. degree programs, effective winter, 2002.

Prerequisite(s): DEV 065 and DEV 075

145 Foundations in Problem Solving & Scientific Literacy 4 Cr. Hrs.

Philosophical and experiential understanding of the constructivist, cooperative classroom environment acquired through introductory hands-on inquiry experiences with the context of fundamental, unifying science themes and core concepts. Three lecture, three lab hours per week.

Prerequisite(s): MAT 102 or sufficient score on placement test

American Sign Language (ASL)

101 Orientation to Deafness 3 Cr. Hrs.

History and culture of the Deaf and sign language with an introduction to collectivist and individualist cultures. Includes the structure of the hearing mechanism and the types and causes of hearing loss; effects of hearing loss on the individual and the family.

102 Interpreting For Deaf I 3 Cr. Hrs.

An overview of the legislation impacting the education and legal rights of Deaf individuals. Examination of the history of interpreting; the terminology of the field; the ethics of interpreting; the interpreting process and the national certification of interpreters.

Prerequisite(s): ASL 101 or MAC 101 ASL 228 or MAC 131

103 Interpreting for Deaf II 3 Cr. Hrs.

An introduction to specialized areas of interpreting, including the role and ethics of the interpreter in various settings. Specialized interpreting techniques for serving Deaf-Blind and oral Deaf populations. Introduction to theatrical, mental health, education, and legal interpreting.

Prerequisite(s): ASL 102 or MAC 102

111 Beginning American Sign Language I 3 Cr. Hrs.

Introductory course in American Sign Language (ASL) emphasizing conversational skills. Includes basic sentence structure of ASL, fingerspelling and numbers. Classroom work stresses practice of conversational ASL, both expressive and receptive; also, introduces to the American Deaf Culture.

112 Beginning American Sign Language II 3 Cr. Hrs.

A continuing study of ASL, building on the conversational skills presented in the introductory course of American Sign Language, including additional types of sentence structure. Practice of conversational ASL, both expressive and receptive and the continuing study of American Deaf culture.

Prerequisite(s): ASL 111 or MAC 111

113 Beginning American Sign Language III 3 Cr. Hrs.

A continuing study of ASL, increasing the conversational skills presented in the introductory courses of American Sign Language. Includes additional types of sentence structure in ASL. Expressive and receptive skill building is emphasized in classroom work. Further study of American Deaf culture.

Prerequisite(s): ASL 112 or MAC 112

116 Community Resources for the Deaf 3 Cr. Hrs.

An overview of service accessibility for Deaf, hard-of-hearing and Deaf-Blind consumers, including mental health, drug and alcohol treatment and prevention, health care, housing, transportation, and employment. Also includes agency referral process, eligibility process for services, and funding sources.

190 American Sign Language Workshop R 0.5 - 6 Cr. Hrs.

An overview of current topics in the field of American Sign Language Interpreting for the Deaf.

201 Interpreting I 4 Cr. Hrs.

Introduction to the principles and techniques of interpreting between English and American Sign Language (ASL) as both target and source languages. Classroom activities and testing include basic interpreting role plays. Also includes English idioms and cognitive processing techniques.

Prerequisite(s): MAC 132 or ASL 229

202 Interpreting II 4 Cr. Hrs.

Further development and competency demonstration of the basic principles and techniques of the interpreting process between English and American Sign Language (ASL), including interpreting of idiomatic cultural expressions and accommodating linguistic variation in the interpreting process. Introduction of team interpreting process and continued acquisition of cognitive processing techniques.

Prerequisite(s): ASL 201 or MAC 201

203 Interpreting III 4 Cr. Hrs.

Advanced principles and techniques of the interpreting process. Classroom activities and testing include role plays incorporating advanced techniques and principles.

Prerequisite(s): ASL 202 or MAC 202

204 Interpreting IV 4 Cr. Hrs.

Development and demonstration of further mastery of advanced interpreting principles and techniques. Platform interpreting, team interpreting, and applications of the code of ethics to interpreting situations.

Prerequisite(s): ASL 203 or MAC 203

207 Role of Interpreter 3 Cr. Hrs.

Role of the interpreter in a variety of interpreting situations, including one-to-one interpreting and voice-to-sign interpreting, student performances, instructor critique and feedback.

Prerequisite(s): ASL 102 or MAC 102 and ASL 229 or MAC 132

211 Medical/Technical/Legal Interpreting 4 Cr. Hrs.

A study of interpreting in medical, mental health, educational, employment and legal settings and terminology/signs unique to each. Practice and performance of the vocabulary used in these settings.

Prerequisite(s): ASL 103 or MAC 103 and ASL 231 or MAC 231

212 Specialized Interpreting 4 Cr. Hrs.

Introduction to American Sign Language vocabulary related to sexual behavior/sexual abuse and drug use/abuse. Designed to increase student's comfort and skill level for interpreting medical, substance abuse treatment, counseling, and legal settings.

Prerequisite(s): ASL 232 or MAC 232

228 Intermediate American Sign Language I 4 Cr. Hrs.

The first intermediate course in the study of American Sign Language (ASL). Includes increasing the conversational skills, additional types of sentences and discourse structure. Continued development of expressive and receptive skills. Study of relevant issues within the American Deaf culture.

Prerequisite(s): ASL 113 or MAC 113

229 Intermediate American Sign Language II 4 Cr. Hrs.

The second intermediate course in American Sign Language (ASL) focusing on upper level grammatical features and functions. Development of receptive and productive capabilities of these upper level features. Discussion of Deafness as a culture and a community and the role of American Sign Language in the community. Introduction to the interpreting process.

Prerequisite(s): ASL 228 or MAC 131 and ENG 111

230 Intermediate American Sign Language III 4 Cr. Hrs.

The third intermediate course in American Sign Language (ASL) with further mastery of upper level grammatical features and functions. Continued development of both receptive and expressive abilities. Development of basic interpreting skills through classroom activities. Additional discussion regarding Deaf culture characteristics.

Prerequisite(s): ASL 229 or MAC 132

231 Advanced American Sign Language I 4 Cr. Hrs.

The first advanced course in the study of American Sign Language (ASL) is an intensive study of the linguistic structure of English and American Sign Language (ASL). Students explore the syntactic similarities and differences between the two languages and learn how to find functional equivalence between the two languages.

Prerequisite(s): ASL 230 or MAC 133

232 Advanced American Sign Language II 4 Cr. Hrs.

The second advanced course in the study of American Sign Language (ASL). The course focuses on student's receptive and productive mastery of using multiple grammatical features, narrative and explanatory discourse, and targeted vocabulary. Principles of self-assessment of both productive and receptive abilities introduced.

Prerequisite(s): ASL 231 or MAC 231

233 Advanced American Sign Language III 4 Cr. Hrs.

The third advanced course in the study of ASL. Designed to achieve fluency of most basic and complex grammatical features of ASL. Activities include incorporating into sign production the necessary adjustments for registers, emotive components, and cultural background.

Prerequisite(s): ASL 232 or MAC 232

236 Transliterating 4 Cr. Hrs.

A preparatory course for the Registry for the Interpreters for the Deaf Certificate of Transliteration exam. The Signing Exact English System of manually coded English is introduced, and conceptual accuracy is stressed for educational interpreting.

Prerequisite(s): ASL 230 or MAC 133

261 ASL Practicum I 3 Cr. Hrs.

The first of three practicum courses. Students are required to complete 100 clock hours of practical experience in order to develop knowledge and skills in the professional field. Students must also attend weekly seminar meetings. Two lecture, seven practicum hours per week.

Prerequisite(s): ASL 103 or MAC 103, ASL 230 or MAC 133, ASL 201 or MAC 201, ASL 207 or MAC 207

262 ASL Practicum II 3 Cr. Hrs.

The second of three practicum courses. Students are required to complete 100 clock hours of practical experience. Students will be given increased responsibility under the supervision of a qualified mentor. Students will attend weekly seminar meeting. Two lecture, seven practicum hours per week.

Prerequisite(s): ASL 261 or MAC 261 and ASL 236 or MAC 236

263 ASL Practicum III 3 Cr. Hrs.

Third and final practicum placement. Continuation of 100 clock hours. Students prepare for local agency evaluations and educational interpreter licensure. Students also will attend weekly seminar meetings. Two lecture, seven practicum hours per week.

Prerequisite(s): ASL 262 or MAC 262

Astronomy (AST)

101 Survey of Astronomy 4 Cr. Hrs.

A survey of the solar system, galaxies, stellar evolution, recently discovered phenomena and cosmology. Three lecture, three lab hours per week.

107 Lab for AST 101

Laboratory must be taken with AST 101.

111 Introduction to Astronomy 3 Cr. Hrs.

Patterns and movements of heavenly bodies; history of astronomy; gravity, light, and matter; various types of telescopes. Students may not receive credit for both AST 111 and AST 101 (previously 114). Optional laboratory AST 117.

Prerequisite(s): DEV 108

112 The Solar System 3 Cr. Hrs.

Planets and their moons; interior and atmosphere of the Sun; comets, asteroids, meteoroids; origins of the solar system; space exploration. Optional laboratory AST 118.

Prerequisite(s): AST 111

113 Stars, Galaxies, & Cosmology
3 Cr. Hrs.

Properties and evolution of stars including the Sun; black holes and other stellar remnants; Milky Way and other galaxies; origin and fate of the Universe. Optional laboratory AST 119.

Prerequisite(s): AST 111

117 Introduction to Astronomy Lab
1 Cr. Hr.

Lab and field activities to supplement AST 111. Three lab hours per week.

Co-requisite(s): AST 111

118 Solar System Lab 1 Cr. Hr.

Lab and field activities to supplement AST 112. Three lab hours per week.

Co-requisite(s): AST 112

119 Stars, Galaxies, & Cosmology Lab
1 Cr. Hr.

Lab and field activities to supplement AST 113. Three lab hours per week.

Co-requisite(s): AST 113

297 Special Topics in Astronomy
R 1 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (TV and newspaper) as well as special interest topics in astronomy. Objectives will vary with the particular content area.

Automotive Technology (AUT)

100 Basic Automotive Systems
3 Cr. Hrs.

Language of automotive systems and major automotive functions. Students will change oil and lubricate own car, perform safety check, ignition tune up, and brake inspection, service cooling system, and evaluate used cars. Basic hand tools required. One lecture, four lab hours per week.

102 Dealership Principles for ASE/CAP
R 0.1 - 3 Cr. Hrs.

Work assignment practices necessary for beginning service technician, including tools and tool usage; paint finesse and touch-up; correcting water leaks, wind noise, rattles; oil changes and tire balancing; parts, service, new and used cars prep. Eye protections required.

108 Engine Systems R 0.1 - 5 Cr. Hrs.

Engine operation, nomenclature, measurements and tolerances, including service and overhaul procedures of cooling, lubrication, and valve train systems (basic engine machining practices). Basic hand tools required. Three lecture, four lab hours per week.

111 Automotive Management
3 Cr. Hrs.

Introduction to an automotive service department as it pertains to management. Skill development for operating an automotive business, including service consulting, service management and communication practices. Instruction in federal, state and local regulations for operating a service department.

112 Service Consultant II 3 Cr. Hrs.

Introduction to automotive selling service, importance of maintenance schedules, warranties, and accounting procedures. Includes legal aspects of running a dealership related to city, state and federal laws.

Prerequisite(s): AUT 111

115 Engine Performance I
R 0.1 - 7 Cr. Hrs.

Operation and service of fuel injection (including computer control) and fuel delivery system, emission control systems and engine fuels. Operation of "On Board Diagnostic" systems. Basic hand tools required. Three lecture, eight lab hours per week.

124 Electrical/Electronic Systems Level I
5 Cr. Hrs.

Basic electricity, Ohm's Law, voltage drops, digital meter usage, schematics, batteries, starting and charging system operation, diagnosis of wire repair procedures and service. Three lecture, four lab hours per week.

Co-registration with AUT 124

125 Electrical/Electronic Systems II
R 0.1 - 7 Cr. Hrs.

Advanced automotive electrical/electronic systems covering strategy based diagnostic procedures for troubleshooting lighting, instrumentation, body controls and other accessory circuits. Air bags theory is discussed along with respective testing and diagnostic procedures. New trends in electrical/electronic technology will be introduced, example - hybrid vehicles. Introduce module communication data bus systems. Ignition system operations are discussed for example: distributorless and coil-on-plug. Three lecture, eight lab hours per week.

Prerequisite(s): AUT 124

128 Advanced Engine Systems
5 Cr. Hrs.

Measurements and tolerances, advanced diagnosis of engine problems, complete engine blueprinting and machining, performance analysis and measurement. Total rebuilding and machining of automotive engines. Complete set of hand tools and eye protection required. Three lecture, four lab hours per week.

Prerequisite(s): AUT 108

142 Manual Transmissions & Drive Line
R 0.1 - 5 Cr. Hrs.

Theory and operation of manual transmission, clutch, transaxle, drive shaft, universal joint, rear axle, limited slip differential and axle shaft, diagnosis, and repair. Basic hand tools required. Three lecture, four lab hours per week.

146 Automotive Heating & Air Conditioning R 0.1 - 5 Cr. Hrs.

Theory and operation of automotive heating and air conditioning systems. Includes lab activity in diagnosis and repair procedures. Basic hand tools required. Three lecture, four lab hours per week.

165 Automotive Brake System
0.1 - 5 Cr. Hrs.

Theory and operation of hydraulic braking systems; drum brake, disc brake, and power assist diagnosis and service. Basic hand tools required. Three lecture, four lab hours per week.

210 Steering, Suspension & Alignment
0.1 - 5 Cr. Hrs.

Steering system diagnosis and service including front and rear suspension components, wheel and tire, and front and rear wheel alignment. Basic hand tools required. Three lecture, four lab hours per week.

215 Automotive Service Operations
10 Cr. Hrs.

Actual experience in the laboratory with diagnosis repair, use of manuals and records, customer relations, safety, communications, supervision and delegation of work. Automotive service facility and operation consideration. Basic hand tools required. Five lecture, 15 lab hours per week.

Prerequisite(s): Approval of chairperson

221 High Performance Engine Blocks & Rotating Assemblies 7 Cr. Hrs.

Measurement and tolerances, diagnosis, disassembly, and machining of engine blocks for high performance applications. Race preparation and balancing of internal components. Theory and discussion of choices for high performance rotating assembly parts such as pistons, connecting rods, bearings and camshafts. Three lecture and eight lab hours per week.

Prerequisite(s): AUT 108 or approval of instructor

222 High Performance Cylinder Heads & Valve Train 7 Cr. Hrs.

Measurement and tolerance, disassembly and machining of cylinder heads. Head flow development and race preparation. Valve train theory and design for high performance use. Complete cylinder head blueprinting. Three lecture, eight lab hours per week.

Prerequisite(s): AUT 108 or approval of instructor

223 High Performance Engine Assembly & Dynamometer Testing 7 Cr. Hrs.

Precision engine assembly using blueprinting techniques. Set up and testing on superflow engine dyno for performance and durability. Familiarization with dyno procedures and software. Three lecture, eight lab hours per week.

Prerequisite(s): AUT 108 or approval of instructor

224 High Performance Induction Systems 7 Cr. Hrs.

Performance rebuilding and tuning of carburetors. Operation and performance applications of electronic fuel injection, nitrous oxide injection, ignition systems, intake manifolds, and superchargers. Evaluation, testing and tuning using a flow bench, engine dynamometer and or chassis dynamometer. Three lecture, eight lab hours per week.

Prerequisite(s): AUT 115 or approval of chairperson

226 Introduction to High Performance Fabrication 7 Cr. Hrs.

Basic chassis design and construction for high performance racing applications. Suspension design, types, and fabrication. Interior and exterior sheet metal design and fabrication. Three lecture, eight lab hours per week.

241 Automatic Transmissions R 0.1 - 7 Cr. Hrs.

Theory and operation of automatic transmissions and transaxles; includes lab experience in diagnostics and overhaul. Basic hand tools required. Three lecture, eight lab hours per week.

245 Engine Performance II R 0.1 - 7 Cr. Hrs.

Advanced diagnostics and repair with engine, ignition, fuel, emission and cooling systems; advanced computer controlled fuel system diagnosis and repair. Basic hand tools required. Three lecture, eight lab hours per week.

Prerequisite(s): AUT 115

265 Vehicle Safety Systems 5 Cr. Hrs.

Theory, operation and service of computerized, mechanical, electrical and hydraulic vehicle safety systems; anti-lock brake systems, inflatable restraint systems, electronic passive restraint systems, traction control systems, four wheel steering systems and computerized ride controls. Basic hand tools and eye protection required. Three lecture, four lab hours per week.

Prerequisite(s): AUT 165 and AUT 125

270 Automotive Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

297 Special Topics in Automotive Technology R 0.3 - 7 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (such as special seminars) as well as additional topic concentration within the discipline. May serve as AUT elective.

Prerequisite(s): Approval of chairperson

Aviation Technology (AVT)**105 Orientation to Aviation 3 Cr. Hrs.**

Overview of aviation career specialties required for successful operation of the national airspace system. Evaluation of career interests relative to the market for aviation opportunities. Guest lecturers and site visits will be used to illustrate the broad spectrum of aviation occupations available.

Prerequisite(s): DEV 065 or ENG 111, ENG 121, ENG 131 and DEV 085

106 Position & Warning Systems 2 Cr. Hrs.

How to operate, inspect, repair and service different indicating systems. Landing gear, speed, configuration, anti-skid, and other remote indicating systems also included. One lecture, two lab hours per week.

107 Fuel Systems 3 Cr. Hrs.

Inspection, operational checkout and repair of fuel system components, fuel tanks, fuel transfer and dumping, fuel indicating systems, fuel temperature indicating, fuel heating, proper leak checking of fuel manifolds, and proper servicing. Two lecture, two lab hours per week.

108 Ice & Rain/Fire Protection 2 Cr. Hrs.

Different types of aircraft ice and rain protection and removal systems including the study of fire protection systems, indicating systems and carbon monoxide detectors. One lecture, two lab hours per week.

110 Ground School/Private Pilot 4 Cr. Hrs.

Preparation for the Private Pilot Knowledge test. Includes all topics required by Federal Aviation Regulations 61.105(b)(1-13); e.g., airplane systems, aerodynamics, regulations, meteorology, navigation, communications and the flight environment.

Prerequisite(s): DEV 065 or ENG 111 and DEV 085 or ENG 112

111 Navigation Science I 3 Cr. Hrs.

Basics of navigation including deduced reckoning (dead reckoning), airways, Global Positioning Systems (GPS), Variable Omni Range (VORs), Non-Directional Beacons (NDBs), horizontal and vertical navigation aids. Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) basics of navigation. Also Federal Aviation Regulations (FARs) affecting navigation.

112 Performance Calculations 2 Cr. Hrs.

Aviation maintenance performance calculations including determining areas and volumes of various geometrical shapes, performing of algebraic operations, extracting roots and raise numbers to a given power, interpreting various horsepower and other performance charts. One and one half lecture, one lab hour per week.

113 Drawings for Aviation Maintenance R 4 Cr. Hrs.

Knowledge and skill development in using aircraft drawings and graphs of different types; includes symbols for drawings and electrical schematics, drawing repairs, and alterations to industry standards. One and one-half lecture hours, five lab hours per week.

114 Fluids & Gasses 2 Cr. Hrs.

Provides the aviation mechanic with an in depth study of aerodynamics, pressure, gas laws, light, vibration and sound, heat and temperature, stress and strain, force and motion, work and power, energy, and weight, and mass, and matter. One lecture, two lab hours per week.

115 Ground Operations & Servicing 3 Cr. Hrs.

Engine starting, engine operation, ground towing and movement of aircraft, taxiing, identify ground operations hazards, hand and radio signals, safety on the flight line, safety in the shop environment, ice protection, jacking and hoisting. One lecture, four lab hours per week.

116 Regulations & Documentation 4 Cr. Hrs.

Provides the aviation mechanic with critical knowledge necessary in the following areas: mechanics privileges, FAA regulations regarding aircraft record entries, maintenance publications, all repair manuals, wiring diagrams, structural repair manuals, corrective action entries in aircraft records, and inspection reports. Three lecture, two lab hours per week.

117 Fluid Lines & Fittings 3 Cr. Hrs.

Tube bending, cutting and flaring, MS flare less fittings, repair of rigid fluid lines, identification of fluid lines, fabrication of hose lines both high and low pressure, pipe fittings, and universal or bulkhead fittings. One lecture, four lab hours per week.

Prerequisite(s): AVT 135

118 Weight & Balance 4 Cr. Hrs.

Theory of aircraft weight and balance including documentation, weighing the aircraft, locating the center of gravity, adverse loaded center of gravity checks, large aircraft weight and balance computations, determination of ballast needs.

119 Aviation Meteorology 3 Cr. Hrs.

Meteorology for aviators including micro and macro weather systems, solar geometry, atmospheric moisture, wind and pressure systems, cyclonic activity, aviation web resources, and flight service station guidance.

120 Private Pilot Flight 2 Cr. Hrs.

Provides pilots in the Professional Pilot option with the flight knowledge necessary to pass the Federal Aviation Administration (FAA) practical test requirements for the Private Pilot certificate.

121 Assembly & Rigging 5 Cr. Hrs.

Proper adjustment of cables and torque tubes, proper alignment of primary and secondary control surfaces, proper inspection and alignment of landing gear and the associated controls, correct alignment of all structures in both fixed wing and rotary aircraft. Two lecture, six lab hours per week.

122 Engine Ignition & Starting I 4 Cr. Hrs.

Inspection, repair and overhaul of magnetos; removal and installation of magnetos; inspection and repair of ignition wiring and harness; starter overhaul and installation. Two lecture, four lab hours per week.

124 Private Pilot Practicum 1 Cr. Hr.

Provides hands-on flight training in a combination of aircraft and simulators. Flight hours logged in this course are qualified by the FAA for credit toward this and more advanced pilot ratings.

125 Developments in Aviation 3 Cr. Hrs.

Provides pilots and other aviation professionals with an in depth understanding of how aviation technology has evolved from the invention of the airplane to today's sophisticated jet aircraft and their equally sophisticated flight systems.

Prerequisite(s): AVT 105

126 Reciprocating Engines I 5 Cr. Hrs.

Reciprocating engine removal, engine requirements for operation, various engine configurations, firing orders, inspections, critical engine parts measurements, use of overhaul manual for dimensions. Two lecture, six lab hours per week.

127 Lubrication 5 Cr. Hrs.

Functions of the lubrication system, reciprocating engine oils, turbine engine oils, lubrication system components, turbine engine lubrication systems, servicing and spectrometric oil analysis, wet and dry sump systems, oil viscosity index, oil screen and filter inspection, and hazardous material concerns of oil. Four lecture, two lab hours per week.

128 Instruments & Fire Protection 3 Cr. Hrs.

Troubleshooting of electrical wiring and connections on instruments, legal repairs allowed on instruments by A & P mechanics, different types of fire protection systems, different extinguishing agents used, auxiliary power units use, inspection, operation, removal and replacement of units requiring servicing and troubleshooting, and a discussion of unducted fan engines. Two lecture, two lab hours per week.

129 Propellers 5 Cr. Hrs.

Inspection, removal and installation, repair and dressing of propellers. Installation, pitch and angle of attack, forces on a propeller, wood propellers, fixed pitch metal propellers, controllable pitch adjustment and systems, constant-speed propellers, feathering systems, governor systems, reversing systems, propeller auxiliary systems, over speed systems, composite blades, and storage of propellers. Two lecture, six lab hours per week.

131 Electrical Aviation Maintenance 5 Cr. Hrs.

Electrons, direction of electrical flow, production of electricity, ohms law, direct current, alternating current, batteries, electrical circuit components, solid state devices, integrated circuits, electrical load circuits, electrical power circuits, and changing chemical to electrical energy associated with aviation maintenance. Three lecture, four lab hours per week.

132 Electrical Systems I 4 Cr. Hrs.

Electrical distribution, controls, switches, devices, and transformers. Use of electrical measuring devices in troubleshooting and repairing wires, and terminal ends. Two lecture, four lab hours per week.

Prerequisite(s): AVT 131

133 Instrument Systems 2 Cr. Hrs.

Mechanical and electronic flight control systems inspection, operation, troubleshooting, and repair. Legal repairs allowed on instruments including: speed, altitude, temperature, pressure, and positioning gages; include how to perform a pitot/static system check. One lecture, two lab hours per week.

134 Communication/Navigation Systems 2 Cr. Hrs.

Inspection, operation, checking, and servicing communication/navigation systems and components including the passenger address, static discharger devices, VOR/ILS/MB, radar beacon transponders, flight management computers and GPWS, antennas, and electronic equipment installations. One lecture, two lab hours per week.

135 Materials & Processes 6 Cr. Hrs.

Selection and proper use of nondestructive inspection, basic heat treatments, identification and selection of correct aircraft hardware, inspection of welds, and precision measurements. Three lecture, six lab hours per week.

136 Sheet Metal I 4 Cr. Hrs.

Identification, cleaning, preparation, forming, layout, bending, cutting, dimpling, countersinking, drilling, installing special fasteners and rivets in sheet metal. Fabrication of sheet metal projects is required. One lecture, six lab hours per week.

137 Aircraft Structural Welding 4 Cr. Hrs.

Structural welding including soldering, brazing, gas-welding, and arc-welding, fabrication of tubular structures, soldering stainless steel, welding stainless steel, aluminum, magnesium, and titanium. One lecture, six lab hours per week.

138 Engine Fuel & Fuel Metering 5 Cr. Hrs.

Fuel system components for turbine and reciprocating engines, carburetor adjustment and overhaul, installation and removal of carburetors, repair fuel metering components, repair and installation of fuel system components, inspection, adjustment, and servicing of engine fuel metering system components. Two lecture, six lab hours per week.

139 Induction/Exhaust/Cooling 4 Cr. Hrs.

Powerplant ice protection, reciprocating engine induction system, superchargers, turbochargers, heat exchangers, turbine engine inlet designs, exhaust system inspection, repairs, removals, installations, and thrust reversers. Two lecture, four lab hours per week.

143 Aircraft Maintenance 3 Cr. Hrs.

Introduction to aircraft maintenance for airframe and powerplant mechanics. Topics covered include overall aircraft systems and theory, aircraft configurations, airframe materials and construction techniques, modes of failure, preventive and predictive maintenance, tolerances, and proper use of tools. One lecture, four lab hours per week.

146 Introduction to Airline Operations 4 Cr. Hrs.

Introduction to the basic structure of an airline, including the functions of the operational control center, airline marketing, maintenance control, fleet planning and scheduling, dispatch flight release, airline operating certificates and specifications, weight and balance forms, passenger seating arrangements and load manifests. Overview of the Federal Aviation Regulations and the Federal Aviation Administration (FAA), including the structure, background, and operation of the current FAA regulations.

147 Pre-Solo Flight Lab 3 Cr. Hrs.

Introduction to the basic flight fundamentals and operation of a single engine aircraft up to solo flight, providing the student with hands-on flight training, including pre-flight procedures, flying skills, and post-flight evaluation. Two lecture, seven practicum hours per week.

148 Airline Crew Emergency Management 3 Cr. Hrs.

Federal Aviation Regulations Part 121.417 Emergency Training and Emergency Situations, including use of certain items of emergency equipment, such as fire extinguishers, life vests, oxygen bottles, and first aid equipment. Focuses on flight crew member duties and responsibilities, crew coordination, aircraft fires, first aid equipment, basic first aid, ground evacuation, ditching, aircraft decompression, crew member incapacitation and basic survival tactics.

149 Special Material Handling 1 Cr. Hr.

Duties and responsibilities for the handling and carriage of dangerous articles and materials in air carrier operations. Hazardous materials table, shipping papers, packaging, marking and labeling, placarding, air carrier requirements regarding loading, storage and handling characteristics as required by Title 49 Code of Federal Regulations (CFR).

150 Crew Resource Management 2 Cr. Hrs.

Awareness of human factors issues as they affect normal and abnormal flight operations, with emphasis on team work training, behavior identification, communications processes and decision behaviors, conflict resolution, skills inventory, workload management and situational awareness.

151 Crew Survival & Rescue Techniques 2 Cr. Hrs.

Overview of the psychology of survival, post-crash survival techniques, prioritization and necessities, survival physiology in the emergency environment, clothing protection and improvised shelter, signaling, air and ground search and rescue, survival kits and emergency equipment and survival skills. Includes winter, desert, jungle, water, hostile territories and extended in-plane hostage survival.

152 Flight Attendant Security 4 Cr. Hrs.

International and domestic airline techniques for ensuring aircraft security and anti-hijacking. Topics include common strategies, hostage situations and victimology, hostile aircraft takeovers, weapons and explosive devices, security requirements, aircraft ground security, flight crew member role, preventive security, explosive devices, Security Identification Display Area (SIDA), air marshal interactions, the Transportation Security Administration (TSA) and the Department of Homeland Security.

160 Instrument Ground School 4 Cr. Hrs.

Basic non-visual reference flight education leading to the FAA instrument written examination. Topics include flight by instruments, theory of instrument operations, air traffic control, Standard Instrument Departures (SIDs), Standard Terminal Arrival Routes (STARs), runway configurations and lighting, minimum meteorological conditions, Federal Aviation Regulations (FARs), and approaches and missed approaches.

161 Beechcraft 1900 Aircraft Performance 2 Cr. Hrs.

Beechcraft 1900 basic aircraft operating performance data, weight and balance, center of gravity computations, weight shifts, takeoff, enroute and landing performance, terrain clearance / driftdown performance, operational applications of Notices to Airmen (NOTAMs), communications, regulatory requirements and abnormal aircraft operating procedures.

162 DC-9 Aircraft Performance 2 Cr. Hrs.

DC-9 basic aircraft operating performance data, weight and balance computations, center of gravity computations, weight shifts, takeoff, enroute and landing performance, terrain clearance / driftdown performance, operational applications regarding Notices to Airmen (NOTAMs), communications, regulatory requirements and abnormal and emergency operating procedures.

163 Boeing 727 Aircraft Performance 2 Cr. Hrs.

Boeing 727 basic aircraft operating performance data, weight and balance, center of gravity computations, takeoff, enroute and landing performance, terrain clearance / driftdown performance, operational applications regarding Notices to Airmen (NOTAMs), communications, regulatory requirements and abnormal aircraft emergency operating procedures.

164 Boeing 737 Aircraft Performance 2 Cr. Hrs.

Boeing 737 basic aircraft performance data, weight and balance, aircraft limitations, takeoff, enroute and landing performance, terrain clearance / driftdown performance, flight planning, operational applications regarding Notices to Airmen (NOTAMs), communications, regulatory requirements and abnormal aircraft emergency operating procedures.

165 Flight Physiology 1 Cr. Hr.

In-depth aeromedical information on the causes, symptoms, prevention and treatment of flight environment disorders. Fatigue, circadian rhythm, diet, hypoxia, carbon monoxide poisoning, hyperventilation, altitude effects, spatial disorientation, visual illusions and psychological factors are included as they relate to pilot performance and survival effectiveness.

166 Practical Dispatch Applications 3 Cr. Hrs.

In-depth coverage of joint Aircraft Dispatcher/Pilot responsibilities and dispatch functions including communications, operational control, fuel planning, abnormal and emergency situations, weather, NOTAMs (Notices to Airmen), and airport facilities as they relate to flight planning. *Prerequisite(s): Approval of chairperson. Students must have taken the FAA Aircraft Dispatcher Knowledge Test and received a passing score of at least 70% prior to enrolling in this course.*

167 IFR Navigation & Planning 3 Cr. Hrs.

Provides students with an in-depth understanding of the study of the earth, time reference and location, chart reading, National Airspace Plan, navigation systems, airborne navigation instruments, instrument approach procedures, aeronautical publications including NOTAMs, and special navigation operations including North Atlantic, Pacific and global differences.

168 Aircraft Dispatcher Oral Preparation 2 Cr. Hrs.

Preparation for the Federal Aviation Administration (FAA) Aircraft Dispatcher certificate through an in-depth understanding of regulations, meteorology, navigation, aircraft systems, communications, air traffic control, emergency and abnormal procedures and practical dispatch applications. At the completion of the course, students will be prepared for the Federal Aviation Administration Aircraft Dispatcher oral examination.

Prerequisite(s): Approval of department. Students must have taken the FAA Aircraft Dispatcher knowledge test and received a passing score of at least 70% prior to enrolling in this course.

171 Aircraft Piston Powerplant Systems 4 Cr. Hrs.

Course includes an in-depth look at piston engine powerplants, inspection, operation, component systems, and overhaul procedures. Includes a survey of the most popular engine makes and models. One lecture, six lab hours per week.

205 Aviation Management 3 Cr. Hrs.

Provides pilots and other aviation professionals with an in-depth knowledge of management, marketing, and finance principles within the complex regulatory framework of the aviation field.

Prerequisite(s): AVT 105

206 Aerodynamics 3 Cr. Hrs.

Provides pilots and other aviation professionals with instruction on flight dynamics. Applies basic fluid theory to aerodynamic surfaces and provides in-depth instruction on the concepts of lift coefficient, drag, stall, icing, turbulence, flaps, spoilers, center of lift, chord, span, and aspect ratios. Two lecture, two lab hours per week.

Prerequisite(s): PHY 131 or permission of chairperson/instructor

211 Navigation Science II 3 Cr. Hrs.

Provides pilots and other aviation professionals with in depth knowledge of the advanced navigation systems used in commercial aviation operations.

Prerequisite(s): AVT 111

213 Corrosion Control 4 Cr. Hrs.

Causes of corrosion, the chemical process, types of corrosion, locations susceptible to corrosion, detecting corrosion, removing and treating corrosion, cleaning of the interior and exterior of the airplane, polishing of windshields and windows, paint removal and protection of bare metal surfaces. Two lecture, four lab hours per week.

214 Cabin Atmosphere Control Systems 3 Cr. Hrs.

Inspection, operation, troubleshooting, repair, and service of the following items: heating, cooling, air conditioning, pressurization, air cycle machines, and gaseous oxygen systems. Two lecture, two lab hours per week.

217 Hydraulics & Pneumatics Systems 3 Cr. Hrs.

Aviation maintenance hydraulic systems operation, trouble shooting, fluid identification and safety precautions, seals, filters, and valves. Pneumatics systems operation, high pressure compressed air use and safety; valves, lines, electrical servos, identification marks for seals, lines, and fittings. One lecture, four hours lab per week.

218 Landing Gear 4 Cr. Hrs.

Inspection, system checkout, removal, overhaul of the landing gear and retraction systems, oleo shock struts, steering systems, wheels, brakes, tires and tubes. Two lecture, four hours lab per week.

219 Turbine Engines 4 Cr. Hrs.

Physics of gas turbine engines, air and non-air breathing engine types, production of thrust, engine sections, types of accessories, engine operations, maintenance requirements, inspections, repair of electrical connections, troubleshooting electrical and pneumatic systems, and testing and trimming of engines. Three lecture, two lab hours per week.

220 Instrument Pilot Flight 3 Cr. Hrs.

Provides pilots in the Professional Pilot degree option with the flight knowledge necessary to pass the Federal Aviation Administration (FAA) practical test requirements for the Instrument rating.

222 Engine Ignition & Starting II 4 Cr. Hrs.

Pneumatic starters and generators, turbine engine starting systems, exciter boxes and leads, removal, inspection, cleaning, and installation of spark plugs, and igniters for turbine engines. Two lecture, four lab hours per week.

Prerequisite(s): AVT 122

224 Instrument Pilot Practicum 1 Cr. Hr.

Provides pilots in the Professional Pilot option with the flight training necessary to pass the Federal Aviation Administration (FAA) practical test requirements for the Instrument rating.

226 Reciprocating Engines II 5 Cr. Hrs.

Dimensional inspection of internal parts, non-destructive inspection of engine parts, supercharges and turbochargers, engine overhaul rebuilding, propeller reduction gear system, and engine installation. Two lecture, six lab hours per week.

Prerequisite(s): AVT 126

227 Fabric & Wood Structures 3 Cr. Hrs.

Wood structures and fabric coverings including identification of types of wood structures, inspection of wood structures, defects in wood structures, and repair of wood structures for aviation maintenance. Also, fabric selection, fiberglass coverings, inspection and testing of fabric and fiberglass covering. Two lecture, two lab hours per week.

228 Aircraft Engines 3 Cr. Hrs.

Basics of propulsion systems including piston, turbine, turboprop, turbojet, turbochargers, turbosuperchargers, and accessory drives. One lecture, four lab hours per week.

229 Aircraft Finishes 3 Cr. Hrs.

Identification letters and numbers, selecting proper aircraft finishes, inspection before applying finishes, inspection of applied finishes, application of different finishes, identification of defects in and below finishes. One lecture, four lab hours per week.

231 Engine Electrical 4 Cr. Hrs.

Identification and repair of wiring using wiring diagrams and standard practices manuals, installation of A.C. and D.C. generators, alternators, wiring, controls, relays, switches, indicators, temperature sensors, circuit breakers, and fuses. Three lecture, two lab hours per week.

232 Electrical Systems II 4 Cr. Hrs.

Troubleshooting load limiting devices, inspections, checking and repairing wiring in compliance with manufactures maintenance manuals, integrated speed drive generators, and auxiliary power unit electrical connections. Two lecture, four hours lab per week.

Prerequisite(s): AVT 131 and AVT 132

234 Reciprocating Engines III 3 Cr. Hrs.

Engine part inspection and measurement, engine assembly, engine installation in aircraft, accessory installation, installation of baffle material around engine, magneto installation and correct timing, engine electrical trouble shooting, and engine troubleshooting. One lecture, four lab hours per week.

Prerequisite(s): AVT 226, AVT 126

236 Sheet Metal II 4 Cr. Hrs.

Removal and installation of windows, doors, and furnishings. Repair of composites, fiberglass and bonded structures; inspection of bonded structures, and laminated surfaces. One lecture, six lab hours per week.

Prerequisite(s): AVT 136

237 Airframe Inspections 2 Cr. Hrs.

Inspecting an airframe and its components for compliance with regulations, manufacturers' manuals, and operation instructions for compliance with airworthiness standards. One lecture, two lab hours per week.

238 Aircraft Avionics 3 Cr. Hrs.

Study of avionics systems, their operations and failure modes, including communications (VHF/UHF radios, Transponders, Data Link, etc.), navigational electronics (VOR, ADF, GPS, RNAV, LORAN, MLS, etc.) primary and secondary flight instruments (Vertical Speed Indicator, Horizontal Situation Indicator, Attitude Director Indicator altimeter, turn coordinator, compass, clock, etc.), and engine instruments (tachometer, oil, fuel pressure, Turbine Inlet Temperature, manifold pressure, etc.). Two lecture, two lab hours per week.

Prerequisite(s): DEV 065 or ENG 111 or ENG 121 or ENG 131 and DEV 085 or permission of chairperson/instructor

239 Powerplant Inspections 2 Cr. Hrs.

Perform inspections including conformity, one hundred hour, preflight, and annual. Compression check, lubrication, ignition, fuel, induction, exhaust, turbocharger, cooling, engine electrical repair of wiring and connectors, electronic inspection of engines, turbine engine sections, hot section inspections, foreign object damage, turbine engine over speed, propellers, and engine accessories. One lecture, two lab hours per week.

240 Human Factors in Aviation 3 Cr. Hrs.

Provides pilots and other aviation professionals with an in depth knowledge of human performance capabilities and limitations and their relationship with aircraft systems operation. Automation and programming of Flight Management Systems (FMS), supervisory control, and Crew Resource Management (CRM), are among the topics that this course will address.

Prerequisite(s): DEV 065 or ENG 111 or ENG 121 or ENG 131 and DEV 085

241 Blind Flying Hazards 2 Cr. Hrs.

Provides pilots and other aviation professionals with an understanding of spatial disorientation and the hazards of blind flying. Through a laboratory using the General Aviation Trainer (GAT II) simulator, students will experience the effects of various types of spatial disorientation and learn to deal with them. One lecture, two lab hours per week.

242 Aircraft Accident Investigation**3 Cr. Hrs.**

Provides pilots and other aviation professionals with knowledge of the techniques used by accident investigators to identify causes of accidents. Case studies of aircraft accidents will be explored and discussed. The results of poor decision making and judgment will be understood and avoided.
Prerequisite(s): DEV 065 or ENG 111 or ENG 121 or ENG 131 and DEV 085

245 Aviation Law**3 Cr. Hrs.**

Provides pilots and other aviation professionals with a working knowledge of the legal system and important legal concepts as they pertain to aviation. The legal aspects of aircraft ownership, rental, insurance, and liability will be explained.
Prerequisite(s): DEV 065 or ENG 111, ENG 121, or ENG 131 and DEV 085

246 Air Traffic Control Communications**3 Cr. Hrs.**

Approach, missed approach, departure and vectoring language and procedures. Includes role playing through a wide variety of flight scenarios in order to build confidence in the pilot.

247 Flight Controls**3 Cr. Hrs.**

Provides pilots and other aviation professionals with instruction on flight controls. The course explores basic concepts of flight controls from conventional systems to advanced fly-by-wire systems.
Prerequisite(s): AVT 206

248 Aircraft Structures & Systems**3 Cr. Hrs.**

Basics of load bearing structural airframe components and related aircraft systems, operational limitations, failure modes, corrosion, repair, inspection, certification, FARs, and documentation. Survey of various models of airframes, from simple light single-engined aircraft to commercial systems. One lecture, four lab hours per week.

250 Commercial Pilot Ground School**4 Cr. Hrs.**

Constant speed propellers, advanced fuel systems, retractable landing gear systems, complex maneuvers, and high altitude operations of complex and high performance aircraft.

251 PCATD Lab**2 Cr. Hrs.**

Provides pilots with access to Sinclair's Personal Computer Aviation Training Device (P.C.ATD) flight simulator lab. Course emphasizes maintaining flight proficiency on the instrument skills required for advanced ratings in the Professional Pilot program. Students must complete a minimum of 10 simulator hours to successfully complete the course. Four lab hours per week.

252 VFR Proficiency Course**1 Cr. Hr.**

Transitional flight training for students who require conversion to professional aviation procedures and FAA Part 141 rules and regulations.

253 Commercial Pilot Flight**2 Cr. Hrs.**

Provides pilots in the Professional Pilot option with the flight knowledge necessary to pass the Federal Aviation Administration (FAA) practical test requirements for the Commercial Pilot certificate.

254 GAT II Instruction**R 2 Cr. Hrs.**

Provides pilots with individual instruction using Sinclair's General Aviation Trainer (GAT II) full motion flight simulator. Course emphasizes instrument skills and spatial disorientation scenarios. Lessons are tailored to meet the student's specific training needs. This course has a program fee.
Prerequisite(s): Faculty permission

255 Multi-Engine Pilot Ground School**4 Cr. Hrs.**

Advanced aircraft systems, fuel management, engine failures, asymmetric thrust, and advanced weight and balance calculations required to operate multi-engine aircraft.

256 Multi-Engine Flight**2 Cr. Hrs.**

Provides aviation pilots in the Professional Pilot option with the knowledge necessary to pass the Federal Aviation Administration (FAA) practical test requirements for the Multi-Engine rating.

257 Flight Laboratory**1 Cr. Hr.**

Provides aviation pilots in the Professional Pilot option with the pilot in command experience necessary to progress toward Federal Aviation Administration (FAA) advanced certificates and ratings. Three lab hours per week.
Prerequisite(s): AVT 120 or permission of chairperson

258 Flight Instructor Ground School**4 Cr. Hrs.**

Includes ground training in instructional methods, including learning processes, lesson planning, and student evaluation processes. Aeronautical training includes the teaching of aviation concepts and principles from beginning pilot to multi-engine pilot, but not instrument rated pilots.

259 Flight Instructor Flight School**2 Cr. Hrs.**

Provides aviation pilots in the Professional Pilot option with the knowledge necessary to pass the stage checks and end-of-course tests for the Certified Flight Instructor (CFI) certificate.

261 Airframe I**3 Cr. Hrs.**

Practical and lab component of A&P program. Limited to A&P students only. One lecture, six lab hours per week.

263 Commercial Pilot Practicum**1 Cr. Hr.**

Provides pilots in the Professional Pilot option with the flight training necessary to pass the Federal Aviation Administration (FAA) practical test requirements for the Commercial Pilot certificate.

266 Multi-Engine Pilot Practicum**1 Cr. Hr.**

Provides pilots in the Professional Pilot option with the flight training necessary to pass the Federal Aviation Administration (FAA) practical test requirements for the Multi-Engine rating.

268 Aircraft Powerplant Applications I**3 Cr. Hrs.**

Components and configuration of aircraft piston engines, and normal operation of piston engines, with practical laboratory experiences. Limited to Airframe and Powerplant Program students. One lecture, four lab hours per week.

269 Flight Instructor Practicum**1 Cr. Hr.**

Provides pilots in the Professional Pilot option with the flight training necessary to pass the FAA end-of-course test requirements for the Certified Flight Instructor (CFI) certificate.

270 Aviation Internship**R 1 - 12 Cr. Hrs.**

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.
Prerequisite(s): Department chairperson's signature

275 Instrument Instructor Ground School**2 Cr. Hrs.**

Ground training in instructional methods for Certified Flight Instructors (CFI) to support qualification as CFII (Certified Flight Instructor, Instrument). Also includes instrument technology and procedures to VFR (Visual Flight Rules) for IFR (Instrument Flight Rules) pilot upgrades.

276 Instrument Instructor Flight School**2 Cr. Hrs.**

Advanced ground training in aviation technologies and procedures. This course contains competencies that are required to upgrade a Certified Flight Instructor (CFI) to a Certified Flight Instructor, Instrument (CFII).

277 Instrument Flight Instructor Practicum 1 Cr. Hr.

Hands-on training in an aircraft and/or simulator to develop the knowledge and skills required to become a Certified Flight Instructor, Instrument (CFII) and to complete the certification process by successfully passing all stage checks, examinations, and/or end-of-course tests.

285 Multi-Engine Instructor Ground School 2 Cr. Hrs.

Ground training in instructional methods for Certified Flight Instructors (CFI) to attain qualification as Multi-Engine Flight Instructors (MEI), including the legal, operational and technical aspects of multi-engine flight.

286 Multi-Engine Instructor Practicum 1 Cr. Hr.

Flight training in instructional methods for Certified Flight Instructors (CFI) to qualify them as Multi-Engine Flight Instructors (MEI). The MEI's teach the legal, operational and technical aspects of multi-engine flight.

297 Special Topics in Aviation Technology R 1 - 6 Cr. Hrs.

Varied content offerings of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom/seminar or other non-traditional manner.

Prerequisite(s): Permission of department chairperson

Biology (BIO)**101 Body Structure & Function 4 Cr. Hrs.**

Basic anatomy and physiology background for ancillary medical personnel emphasizing basic principles of the structure and function of the human body.

104 HIV/AIDS 3 Cr. Hrs.

Balanced view of the biological, medical, social, and legal issues associated with HIV disease and AIDS.

105 Introduction to Biology 4 Cr. Hrs.

Focuses on cell structure and function, processes of metabolism, genetics, ecology, diversity. Three lecture, two lab hours (BIO 106) per week.

106 Lab for BIO 105
*Laboratory must be taken with BIO 105.***107 Human Biology 5 Cr. Hrs.**

Survey of structure and function of the human body. Four lecture, two lab hours (BIO 108) per week.

Prerequisite(s): DEV 065 and DEV 075 and DEV 085 or equivalent

108 Lab for BIO 107
*Laboratory must be taken with BIO 107.***111 General Biology I 4 Cr. Hrs.**

Basic chemistry, cytology, cell energetics, cell reproduction.

Prerequisite(s): DEV 065

112 General Biology II 4 Cr. Hrs.

Transmission and molecular genetics, gene regulation, microevolution, speciation. Three lecture, two lab hours (BIO 118) per week.

Prerequisite(s): BIO 111

113 General Biology III 4 Cr. Hrs.

Population genetics, evolution, biological diversity, and ecology. Three lecture, two lab hours (BIO 119) per week.

Prerequisite(s): BIO 112

117 Lab for BIO 111

Laboratory must be taken with BIO 111.

118 Lab for BIO 112

Laboratory must be taken with BIO 112.

119 Lab for BIO 113

Laboratory must be taken with BIO 113.

125 Cardiopulmonary Anatomy & Physiology 5 Cr. Hrs.

Advance study of adult lung, heart, and renal anatomy and physiology including: ventilation, pulmonary mechanics, diffusion, gas transport, cardiac function and pulmonary perfusion, acid-base balance and interpretation with emphasis on patient scenarios.

Prerequisite(s): BIO 107

131 Radiologic Anatomy & Physiology I 5 Cr. Hrs.

Structure and function of the human body and radiologic appearance. Four lecture, two lab hours (BIO 137) per week.

Prerequisite(s): DEV 065, DEV 075 or DEV 085 or equivalent

132 Radiologic Anatomy & Physiology II 5 Cr. Hrs.

Structure and function of the human body. Four lecture, two lab hours (BIO 138) per week.

Prerequisite(s): BIO 131

137 Lab for BIO 131

Laboratory must be taken with BIO 131.

138 Lab for BIO 132

Laboratory must be taken with BIO 132.

141 Principles of Anatomy & Physiology I 4 Cr. Hrs.

Structure and function of the human body with an emphasis on introductory terminology, biochemistry, cytology, digestion, metabolism, nutrition, arthrology, skeletal and integumentary systems. Three lecture, two lab hours (BIO 147) per week.

Prerequisite(s): DEV 065, DEV 075, DEV 085 or equivalent and CHE 117 or 120 or equivalent

142 Principles of Anatomy & Physiology II 4 Cr. Hrs.

Continuation of BIO 141/147, Principles of Anatomy and Physiology I, with an emphasis on the human muscular, nervous, endocrine and reproductive systems. Three lecture, two lab hours (BIO 148) per week.

Prerequisite(s): BIO 141 or BIO 121

143 Principles of Anatomy & Physiology III 4 Cr. Hrs.

Continuation of BIO 142/148, Principles of Anatomy and Physiology II, with an emphasis on cardiovascular, lymphatic, immune, respiratory, urinary systems, and water, electrolyte, and acid/base balance. Three lecture, two lab hours (BIO 149) per week.

Prerequisite(s): BIO 142

147 Lab for BIO 141

Laboratory must be taken with BIO 141.

148 Lab for BIO 142

Laboratory must be taken with BIO 142.

149 Lab for BIO 143

Laboratory must be taken with BIO 143.

161 Human Anatomy & Physiology I 5 Cr. Hrs.

Anatomical structure & physiological function of cells, tissue, skin, muscles, nerves and bones. Emphasis on structural relationships. Four lecture, two lab hours (BIO 166) per week.

162 Human Anatomy & Physiology II 5 Cr. Hrs.

Continuation of BIO 161. Anatomical structure and physiological function of the cardiovascular, respiratory nervous, urinary and digestive systems. Emphasis on structural relationships. Four lecture, two lab hours (BIO 167) per week.

Prerequisite(s): BIO 161, BIO 166

166 Lab for BIO 161

Laboratory must be taken with BIO 161.

167 Lab for BIO 162

Laboratory must be taken with BIO 162.

171 Principles of Biology I 5 Cr. Hrs.

First course in a university parallel sequence for biology and science majors. Topics include the scientific method, basic chemical and biochemical foundations, cell biology, cell respiration, photosynthesis, cell reproduction, and Mendelian and chromosomal genetics. Four lecture, three lab hours (BIO 177) per week.

Prerequisite(s): DEV 065 and DEV 075, MAT 101 or equivalent

172 Principles of Biology II 5 Cr. Hrs.

The second course in a university parallel sequence for biology and science majors. Topics include DNA structure and replication, protein synthesis, microbial genetics, eukaryotic gene regulation, DNA technology, developmental genetics, Darwinian evolution, population genetics (microevolution), speciation (macroevolution), phylogeny and systematics. Four lecture, three lab hours (BIO 178) per week.

Prerequisite(s): BIO 171

173 Principles of Biology III 5 Cr. Hrs.

A continuation of BIO 172. Topics covered include Origin of Life, prokaryotes, protists, plant diversity and evolution, fungi, invertebrates, vertebrate evolution, human evolution, animal reproduction, behavioral ecology, conservation biology. Four lecture, three lab hours (BIO 179) per week.

Prerequisite(s): BIO 172

177 Lab for BIO 171

Laboratory must be taken with BIO 171.

178 Lab for BIO 172

Laboratory must be taken with BIO 172.

179 Lab for BIO 173

Laboratory must be taken with BIO 173.

205 Microbiology 4 Cr. Hrs.

Morphology and physiology of microorganisms and selected human parasites, mechanisms of disease production, host responses, spread of infectious diseases. Three lecture, three lab hours (BIO 206) per week.

Prerequisite(s): BIO 107 or BIO 111 or BIO 115 or BIO 121 or BIO 141 or BIO 161 or BIO 211 or CHE 117 or CHE 122

206 Lab for BIO 205

Laboratory must be taken with BIO 205.

211 Human Physiology 5 Cr. Hrs.

Essentials of human physiology for nursing students in the LPN Fast Tract Program who have had an anatomy and physiology course in LPN school; therefore, this course substitutes for the departmental anatomy and physiology sequence (BIO 141, 142, & 143). Other students who have completed one of the course prerequisites may take this course to gain a background in the functioning of the human body at a more advanced level. Four lecture, three lab hours (BIO 212) per week.

Prerequisite(s): BIO 107 or BIO 112 or BIO 121 or BIO 141 or permission of instructor

212 Lab for BIO 211

Laboratory must be taken with BIO 211.

213 Essentials of Exercise Physiology 3 Cr. Hrs.

Study of how the major body systems are affected by exercise and how systems adapt to long term fitness, strength, and performance training.

Prerequisite(s): BIO 107 or BIO 113 or BIO 143

222 Evolution 3 Cr. Hrs.

Emphasis on Charles Darwin, speciation, fossils, radiometric dating, natural selection, mutations, macroevolution, mass extinctions, coevolution, sexual reproduction, human evolution, religious issues.

225 Ecology 4 Cr. Hrs.

Basic concepts in ecology and application to current environmental issues. Focuses on terrestrial and aquatic communities, species diversity, succession, population dynamics (ecological efficiency), conservation of natural resources, field experiences, data collection, analysis of environment. Three lecture, three lab hours (BIO 226) per week.

226 Lab for BIO 225

Laboratory must be taken with BIO 225.

227 Tropical Ecology 5 Cr. Hrs.

Exploration of tropical ecosystems including the tropical rain forest, coral reef, and mangrove communities. A two-week travel/study component within a neotropical country (such as Belize, Costa Rica) is required. The course covers concepts of biodiversity, community interactions, plant and animal adaptations, conservation, collaborative field projects, multicultural exposure.

Prerequisite(s): Permission of instructor

235 Genetics 5 Cr. Hrs.

Fundamental principles, concepts, and techniques of genetics. Classical/transmission genetics, molecular genetics, population genetics, quantitative genetics, and the impact of genetics on technology and society. The laboratory will emphasize basic methods of genetic research and analysis. Four lecture, three lab hours (BIO 236) per week.

Prerequisite(s): BIO 113 or BIO 173 or BIO 143 and MAT 116

236 Lab for BIO 235

Laboratory must be taken with BIO 235.

240 Field Botany 4 Cr. Hrs.

Field identification of local vascular plant species and factors influencing their habitat distribution. Three lecture, two lab hours (BIO 240) per week.

Prerequisite(s): BIO 105 or BIO 113

245 Concepts in Biology 5 Cr. Hrs.

Basic concepts and applications of biology, including basic needs of living things, growth and development, structure and function of organisms including cells, tissues, organs; basic heredity, basic botany, ecological principles and environmental education. Applications use an inquiry learning environment which emphasizes science process skills integrated with mathematics. Early childhood education majors only. Does not satisfy biology requirement for middle childhood education majors. Four lecture, three lab hours per week.

Prerequisite(s): CHE 245 and PHY 245

246 Lab for BIO 240

Laboratory must be taken with BIO 240.

270 Biology Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

297 Special Topics in Biology R 1 - 6 Cr. Hrs.

Provides opportunity to receive credit for non-traditional courses, workshops, and special interest topics in Biology.

Business Information Systems (BIS)

101 Personal Computer Keyboarding 2 Cr. Hrs.

Development of "touch" keyboarding using word processing software on a personal computer; development of competency on the ten-key pad; minimum of 20 wpm expected. Out-of-class lab work required.

102 Document Formatting 2 Cr. Hrs.

Introduction to word processing software and continued development of personal computer skills; format and produce reports, letters, memos, multiple column tables, and other business documents; minimum speed of 35 wpm expected. Out-of-class lab work required.

Prerequisite(s): BIS 101 or OIS 101 or OIS 118 and BIS M61 or OIS M61 or BIS 160 or OIS 160

103 Advanced Document Formatting/Skillbuilding 4 Cr. Hrs.

Use of personal computer word processing software to produce correctly formatted letters and memos, complicated tables, reports, and other business documents; minimum of 50 WPM expected. Out-of-class lab work required.

Prerequisite(s): BIS 102 or OIS 102 and BIS M62 or OIS M62 or BIS 161 or OIS 161

104 Introduction to P.C. Usage 2 Cr. Hrs.

This hands-on class focuses on the components of a personal computer, including an introduction to the Windows graphic user interface, use of the mouse and understanding icons, buttons, and menus. Also includes creating directories, copying and moving files, and changing and enhancing desktop features. Introduction to application software and the World Wide Web. Elementary P.C. assignments require lab time outside of class.

105 Computer Concepts 3 Cr. Hrs.

Introduces students to personal computers, software, peripheral devices, and other current and developing hardware and software elements within the home or office setting. History, equipment, programming concepts, information media and literature of computer information systems in business and industry are introduced. Elementary P.C. assignments require lab time outside of class.

109 Keyboarding Speed/Accuracy Development 4 Cr. Hrs.

Development of increased personal computer keyboarding speed and accuracy through proper diagnostic testing and corrective procedures.

114 Records Management & Electronic Files 3 Cr. Hrs.

Introduction to the methods of appropriately saving, naming, and managing files for paper-based and electronic storage and retrieval. Also includes alphabetic filing, numeric, alpha/numeric, and other classification systems in addition to about archive creation and confidentiality, choosing equipment and supplies. Backups, disaster planning/recovery programs, and the life cycle of recorded media will be covered. Emerging technologies within electronic records storage and retention will be included.

115 Work Place Technologies 2 Cr. Hrs.

An introduction of the newer technologies that have gained acceptance within the work place: scanners and OCR software, digital cameras, voice recognition software, multipurpose devices, copiers, and productivity software for scheduling. MS Outlook software will be covered in detail.

116 Medical Office Procedures 4 Cr. Hrs.

Basic principles of the office support staff/secretarial, bookkeeping duties, and responsibilities pertinent to the medical office and health care agencies.

Prerequisite(s): BIS 136 or OIS 136 and BIS 102 or BIS 103 or OIS 102 or OIS 103

117 Electronic Files Management 2 Cr. Hrs.

Introduction to the methods of appropriately saving, naming, and managing files for electronic storage and retrieval. Also included: backups, disaster planning/recovery programs, the life cycle of recorded media and emerging technologies within electronic records storage.

135 Machine Transcription 3 Cr. Hrs.

Transcription of correspondence in various letter forms from dictated media cassettes to proper form using transcribers and personal computers with an up-to-date word processing software package, emphasizing English grammar skills.

Prerequisite(s): BIS 103 or OIS 103 and ENG 132 or ENG 112, BIS M11 must be taken as a co-requisite

136 Introduction to Medical Terminology 4 Cr. Hrs.

Root words, prefixes, suffixes, and combining forms as well as anatomy and physiology as it pertains to the medical office specialist; terminology, clinical procedures, and pathologies relating to the digestive and urinary systems.

137 Intermediate Medical Terminology 4 Cr. Hrs.

Correct spelling, pronunciation, definition, use of words, clinical procedures and pathologies relating to the female and male reproductive, nervous, cardiovascular, respiratory, blood and lymphatic systems.

Prerequisite(s): BIS 136 or OIS 136

138 Advanced Medical Terminology 4 Cr. Hrs.

Correct spelling, pronunciation, definition, use of words, clinical procedures and pathologies relating to the musculoskeletal system, the skin, sense organs, endocrine system, cancer medicine, radiology and pharmacology.

Prerequisite(s): BIS 136 or OIS 136

143 Introduction to Transcription & Legal Terms 4 Cr. Hrs.

Spelling, pronunciation, and definitions of legal terms and their proper use by legal professionals. Transcription of correspondence from dictated media cassettes into proper business formats using transcribers and personal computers and an up-to-date word processing software package, emphasizing English grammar and proofreading skills.

160 Introduction to Word, PowerPoint, & Excel 3 Cr. Hrs.

Course is a combination of three modules: BIS M61 (Word), BIS M51 (PowerPoint), and BIS M41 (Excel). Fundamental concepts and applications of Microsoft Word, PowerPoint, and Excel. Not for BIS majors. Assumes experience with Microsoft Word, PowerPoint, Excel and Microsoft Windows. Keyboarding skills necessary. Out-of class work required.

161 Intermediate Word, PowerPoint, & Excel 3 Cr. Hrs.

Course is a combination of three modules: BIS M62 (Word), BIS M52 (PowerPoint), and BIS M42 (Excel). Intermediate concepts and applications of Microsoft Word, PowerPoint, and Excel. Assumes experience with Microsoft Word, PowerPoint, Excel and Microsoft Windows. Keyboarding skills necessary. Out-of-class lab work required.

Prerequisite(s): BIS 160 or OIS 160

162 Advanced Word, PowerPoint, & Excel 3 Cr. Hrs.

Course is a combination of three modules: BIS M63 (Word), BIS M53 (PowerPoint), and BIS M43 (Excel). Advanced concepts and applications of Microsoft Word, PowerPoint, and Excel. Assumes experience with Microsoft Word, PowerPoint, Excel and Microsoft Windows. Keyboarding skills necessary. Out-of-class lab work required.

Prerequisite(s): BIS 161 or BIS M42 and BIS M52 and BIS M62

172 Integrated Solutions 2 Cr. Hrs.

Integration of the Microsoft Office Suite (Word, PowerPoint, Excel, and Access) with exercises to acquaint students with how the individual applications in Microsoft can work individually and together to solve business problems. Assumes experience with basic MS Office packages, computers, and Microsoft Windows. Keyboarding skills necessary. Out-of-class lab work required.

Prerequisite(s): BIS 161 and BIS M32 or BIS M32 and BIS M42 and BIS M52 and BIS M62

201 Customer Service 3 Cr. Hrs.

Introduction to the basic concepts of customer service. Topics include customer service telephone skills, face-to-face communication, confidentiality, professional attitude when dealing with clients/customers, decision making, time management, problem solving, and dealing with difficult situations. Attention to detail will be emphasized.

202 Advanced Customer Service Concepts 3 Cr. Hrs.

This course will introduce students to the electronic application of customer service. Topics to be covered will include the use of emerging technology within the customer service setting, quality tools and tracking, phone-based customer service, and scenarios/cases.

Prerequisite(s): BIS 201

207 Telecommunications 2 Cr. Hrs.

Telecommunications technologies: voice mail, management of telecommunications equipment, appropriate use of services, automated dictation systems, fax machines, cell phones, digital phones, pagers, multifunction devices, and software for teleconferencing purposes.

215 Office Applications Practicum/Seminar 4 Cr. Hrs.

This course will simulated a work environment where students are expected to practice professional work behavior and ethics, and to employ critical thinking skills to solved simulated business problems and accomplish work related tasks.

Prerequisite(s): BIS 161 or BIS M62 and BIS M42, BIS M52 and BIS M32 or BIS M85 and BIS M45, BIS M55 and 80 credit hours

220 Computer Applications for the Medical Office 4 Cr. Hrs.

Entry level skills for computer based management of a medical office emphasizing software for patient records, billing and collections, daily financial transactions, insurance processing, and the production of routine reports and summaries. Out-of-class lab work required.

Prerequisite(s): BIS 102

223 Using Word Perfect 2 Cr. Hrs.

Basic office applications of Word Perfect software, emphasizing commonly used commands and strategies for formatting, editing, and revising text. Out-of-class lab work is required.

251 Medical Transcription I 4 Cr. Hrs.

Transcription of medical/surgical reports on a personal computer with word processing software into an accurate and acceptable format using medical terminology.

Prerequisite(s): BIS 103 or OIS 103 and BIS 137 or BIS 138 or OIS 137 or OIS 138 and ENG 199

252 Medical Transcription II 4 Cr. Hrs.

Continuing emphasis on precision of transcription and personal computer word processing skills in preparation of complex medical reports. Second of a two-course sequence.

Prerequisite(s): BIS 251 or OIS 251

270 Business Information Systems Internship R 1 - 9 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

Prerequisite(s): Approval of department

297 Special Topics in Business Information Systems R 0.5 - 6 Cr. Hrs.

Provides opportunity to receive credit for new and non-traditional courses within developing technology and career related courses/opportunities, or service learning courses/activities, including special interest topics, workshops or customized training.

M25 Desktop Publishing 2 Cr. Hrs.

Desktop publishing for office applications using Microsoft Publisher software for creation of proposals, flyers, newsletters, and web pages using styles and other special features; keyboarding skills necessary; out-of-class lab work required.

M35 Microsoft Access 2 Cr. Hrs.

Introductory and intermediate database features of Microsoft Access. Skills and activities used to create databases and tables, enter and update data, display and print records, create forms and queries, and create reports, including subforms, updating forms and report designs. Assumes experience with computers and Microsoft Windows. Keyboarding skills necessary. Out-of-class lab work required.

M36 Advanced/Expert Access 3 Cr. Hrs.

Advanced and expert level features of Microsoft Access: managing and analyzing database objects, creating, running, and troubleshooting macros; creating modules using Visual Basic; managing databases through backup procedures, synchronization, and security techniques including user level permissions, password protection and data encryption. Also includes exporting Microsoft Access objects to other programs, defining relationships and join properties, creating action queries, advanced reports, and basic data access pages.

Prerequisite(s): BIS M35 or BIS M32

M45 Microsoft Excel 2 Cr. Hrs.

Spreadsheet applications emphasizing planning, creating, printing, and saving workbooks, entering data into worksheets, using formulas and functions, enhancing spreadsheets using formatting and style features, and creating and enhancing charts. Assumes experience with Microsoft Windows. Keyboarding skills necessary. Out-of-class lab work required.

M46 Advanced/Expert Excel 2 Cr. Hrs.

Advanced and expert level Excel skills, including analyzing list data, generating reports and charts with enhancements, mapping data, What-if Analysis, and pivot tables, as well as incorporating worksheets in other applications and linking worksheets to the Internet.

Prerequisite(s): BIS M45 or BIS 161 or BIS M42

M55 Microsoft PowerPoint 2 Cr. Hrs.

Features, commands, and capabilities of Microsoft PowerPoint for creating business presentations for delivery via electronic slide shows, paper-based printouts, 35 mm slides, and the Internet. Presentation creation and enhancement using formatting features, animation, movies and sounds, and various delivery methods. Assumes experience with computer and Microsoft Windows. Keyboarding skills necessary. Out-of-class lab work required.

M75 The Internet 2 Cr. Hrs.

Navigation through the Internet and the World Wide Web with intermediate and advanced applications, including information retrieval, file transfer, file modification, online service utilization, e-mail attachments, basic web page building, electronic commerce, and Internet security issues. Internet terminology, concepts, and applications. Assumes experience with computers and Microsoft windows. Keyboarding skills necessary. Out-of-class lab work required.

M81 Intermediate Microsoft Project 1 Cr. Hr.

Basic skills and competencies of the Microsoft Project software: managing tasks, time management, management of resources, handling multiple projects, tracking, graphics, and customizing.

M82 Intermediate Microsoft Project 1 Cr. Hr.

Intermediate skills and competencies of the Microsoft Project software: Project Family Management, Labor Overtime and Interim Plans, Macros, and Consolidating Projects.

Prerequisite(s): BIS M81

M85 Microsoft Word 2 Cr. Hrs.

Fundamental and intermediate concepts and applications of Microsoft Word for professional and/or personal use. Commonly used commands and strategies for formatting, editing, and revising text. Keyboarding skills necessary and assumes experience with computers and Microsoft Windows. Out-of-class lab work required.

M86 Advanced/Expert Word 2 Cr. Hrs.

Advanced and expert concepts and applications of Microsoft Word for professional and/or personal use emphasizing creating and using forms; creating and working with master documents and subdocuments; tracking changes; working with comments; and creating an index, table of contents, and a table of figures.

Prerequisite(s): BIS M62 or BIS 161 or BIS M85

Biotechnology (BTN)

110 Biotechnology & Bioethics

3 Cr. Hrs.

Historical perspective of the development of biotechnology, introduction to terminology and fields of study, recent advances in biotechnology, their implications and applications; discussion of current issues in bioethics.

115 Careers in Biotechnology

1 Cr. Hr.

The biotechnology job market, resumes and portfolios, interviewing, essential work place skills, professionalism in the work place and small group interactions.
Prerequisite(s): Restricted to majors

120 Laboratory Safety & Regulatory Compliance

3 Cr. Hrs.

Overview of laboratory safety procedures and precautions, biosafety, radiation safety, compliance standards of regulatory agencies. Also includes current Good Laboratory Practice (cGLP) and current Good Manufacturing Practice (cGMP).
Prerequisite(s): MAT 106 or MAT 116 and Concurrent course CHE 131 or CHE 120 or equivalent and restricted to majors

130 Biological Reagents Preparation

4 Cr. Hrs.

Overview of chemical grades of reagents used in biological research, review of guidelines for safe storage of chemicals, emphasis on chemical formulas, including molarity, molality, normality; preparation of various reagents and media for biological applications, use of sterile techniques in reagent preparation. Two lecture, four lab hours (BTN 131) per week.
Prerequisite(s): BTN 120 and restricted to majors

131 Lab for BTN 130

Laboratory must be taken with BTN 130.

140 Cell Culture

3 Cr. Hrs.

Historical overview of the development of cell culture, introduction to sterile techniques used in cell and tissue culture, use of laminar flow hoods, in vitro maintenance and propagation of mammalian cells, cell counting, cell viability tests, cryopreservation and recovery of cell lines. Two lecture, three lab hours (BTN 141) per week.
Prerequisite(s): BIO 111 and BTN 130 and restricted to majors

141 Lab for BTN 140

Laboratory must be taken with BTN 140.

210 Protein Purification & Analysis

6 Cr. Hrs.

Introduction to purification methods—bulk fractionation, size-exclusion, ion-exchange and affinity chromatography; equipment, buffers, assays used; principles of protein quantification and analysis; precautions taken to avoid proteolysis, loss of activity; purification strategy, calculation of yield, enrichment, purity. Three lecture, six lab hours (BTN 211) per week.

Prerequisite(s): BIO 112 and CHE 122 and BTN 130 restricted to majors

211 Lab for BTN 210

Laboratory must be taken with BTN 210.

220 Microbiology & Fermentation Methods

4 Cr. Hrs.

Introduction to microbiology, metabolism and genetics of microorganisms, food and water microbiology, use of microbes in biotechnology, principles of fermentation, batch vs. continuous cultures, use of bioreactors for large scale propagation. Two lecture, four lab hours (BTN 221) per week.

Prerequisite(s): BIO 112 and CHE 122 and BTN 130 restricted to majors

221 Lab for BTN 220

Laboratory must be taken with BTN 220.

230 Molecular Biology Techniques

6 Cr. Hrs.

Structure of nucleic acids, DNA replication mechanisms, DNA cloning, genetic engineering techniques, use of plasmids and viruses as vectors, nucleic acid analysis by electrophoresis, Southern and Northern hybridization, DNA amplification and sequencing. Three lecture, six lab hours (BTN 231) per week.

Prerequisite(s): BIO 112 and CHE 122 and BTN 130 restricted to majors

231 Lab for BTN 230

Laboratory must be taken with BTN 230.

235 HPLC Methods

2 Cr. Hrs.

Introduction to high performance liquid chromatography (HPLC) instrumentation and application. Overview of HPLC terminology, fundamentals of the different types of chromatography, and sample preparation; includes establishing parameters for chromatographic separations.

Prerequisite(s): BTN 210 restricted to majors

240 Bioinformatics

3 Cr. Hrs.

Introduction to public domain DNA sequence databases, use of software and Internet resources for database searching, use of database information in sequence comparisons, sequence alignment, structure prediction, gene prediction, and genome analysis. Two lecture, two lab hours (BTN 241) per week.

Prerequisite(s): BIO 113 and BTN 210 and BTN 230 and BIS 160 or equivalent

241 Lab for BTN 240

Laboratory must be taken with BTN 240.

270 Biotechnology Internship

R 3 - 6 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

Prerequisite(s): Approval of department

295 Biotechnology Seminar

2 Cr. Hrs.

Review of current issues in biotechnology through student literature research and presentation.

Prerequisite(s): Must be second year student and restricted to majors

297 Special Topics in Biotechnology

R 1 - 3 Cr. Hrs.

Provides opportunity to receive credit for non-traditional courses, workshops, and special interest topics in Biotechnology.

Prerequisite(s): Instructor's signature

Business Technology (BU)

101 Student Success Experience

2 Cr. Hrs.

Campus resources overview, general education introduction and skills development; diversity; learning/teaching styles; study skill; planning and goal setting.

Business Internship (BUS)

270 Business Internship

R 1 - 6 Cr. Hrs.

Application of classroom skills and competencies to career related work site activities related to academic program. Development of learning objectives linking classroom learning with responsibilities at the job site, preparation of a final report and/or project as agreed upon with internship instructor, and evaluation onsite by work site supervisor. Academic credit is earned for the learning that occurs as a result of working, not for actual work done on the job. Students already working in their career field may apply to use a current job to meet internship requirements; learning objectives must reflect new and/or expanded responsibilities or special projects at the work site during the current academic quarter.

Prerequisite(s): Approval of coordinator or approval of chairperson

Career Planning (CAP)

105 Career Selection 2 Cr. Hrs.

Exploration of personal and career goals, examination of occupational trends and options. Practical experience with resume development and interviewing techniques.

125 Pre-Retirement Planning & Seminar 2 Cr. Hrs.

An eight week seminar covering major areas of planning for retirement: health, housing, financial, legal and personal adjustment.

205 Job Campaign Strategy 2 Cr. Hrs.

Career strategies for students ready to apply for employment. Emphasizes techniques of job hunting, salary negotiations, interview skills, and resume preparations.

Civil Engineering Technology (CCT)

102 Basic Construction Surveying 4 Cr. Hrs.

Introduction to the use of surveying equipment with appropriate math concepts. Automatic levels, laser levels and total stations will be used in practical surveying projects. Two lecture, four lab hours per week.

Prerequisite(s): DEV 108 or equivalent math score

103 Civil Construction Blueprints & Drafting 3 Cr. Hrs.

Understanding civil and construction blueprints by sketching and drafting. Two lecture, two lab hours per week.

Prerequisite(s): DEV 108 or equivalent math score

105 Properties of Construction Materials 3 Cr. Hrs.

Properties of basic construction materials examined through laboratory analysis. Emphasis on how properties of materials affect their use in the construction industry. One lecture, four lab hours per week.

106 Construction Workers Tools for Success: Essential Work Place Skills 1 Cr. Hr.

An overview of the unique human relations in the construction industry, with emphasis on building a strong trusting relationship with supervisors and fellow workers.

120 Introduction to Construction Trades 3 Cr. Hrs.

An orientation to the various construction trades including carpentry, ironwork, masonry, concrete, electrical, plumbing and HVAC. One lecture, six lab hours per week.

141 Portland Cement Concrete Level I 4 Cr. Hrs.

Introduction to the craft of working with concrete with strong emphasis on hands-on learning exercises. Two lecture, six lab hours per week.

Prerequisite(s): CCT 118 or CCT 120

152 Light Frame Structural Systems I 4 Cr. Hrs.

Introduction to the fundamentals of framing systems, floor systems, wall framing and stair layout. Two lecture, six lab hours per week.

Prerequisite(s): CCT 120

153 Light Frame Structural Systems II 4 Cr. Hrs.

Further study of wood frame construction with emphasis on doors, windows, roofs, and sheathing. Two lecture, six lab hours per week.

Prerequisite(s): CCT 152

154 Commercial Interiors 4 Cr. Hrs.

An orientation to interior and exterior finishes on frame construction. Two lecture, six lab hours per week.

181 Construction Techniques I R 1 - 8 Cr. Hrs.

Basic safety, hand and power tools, wood building materials and fasteners and framing systems.

182 Construction Techniques II R 1 - 8 Cr. Hrs.

Construction of concrete structures including forming, placing and finishing.

Prerequisite(s): CCT 181

183 Construction Techniques III R 1 - 8 Cr. Hrs.

Exterior and interior finishing of frame structures including roofing materials, siding, drywall, stairs, doors and trim.

Prerequisite(s): CCT 182

184 Construction Techniques IV R 1 - 8 Cr. Hrs.

Development of advanced skills for construction technicians including site layout, floor and roof systems and metal buildings. An introduction to welding, light equipment operation and project management.

Prerequisite(s): CCT 181

203 Subdivision Design 4 Cr. Hrs.

Research of court house records for deed transfers and descriptions. Study of subdivision regulations for a finished plat. Grading and storm water control. Two lecture, four lab hours per week.

Prerequisite(s): CCT 247

206 Reinforced Concrete Design 4 Cr. Hrs.

Theories of structural analysis with emphasis on the design of reinforced concrete. Hands-on laboratory problems will enable students to demonstrate design concepts. Two lecture, four lab hours per week.

Prerequisite(s): CCT 105 and MET 207 or CCT 105 and ETD 222

216 Construction Estimating 4 Cr. Hrs.

Construction estimating, beginning with an understanding of the costs of labor equipment and materials as well as profit and overhead. Quantity measurements of basic construction materials will be used to develop bidding packages. Two lecture, four lab hours per week.

Prerequisite(s): CCT 105 and CCT 256 and MAT 131 and MET 198 or CCT 105 and CCT 256 and ETD 198 and MAT 131 and either ARC 101 and ARC 105 or ARC 138

235 Legal Principles for Surveyors 4 Cr. Hrs.

Advanced course in surveying. Gives working knowledge of real property, systems used to describe land, simultaneous conveyances created by state law, reversion rights, riparian and littoral owners, and retracements.

240 Construction Law & Specifications 3 Cr. Hrs.

Examination of legal principles in the area of contracts and specifications, including development, design, manufacture and sale of reliable products.

242 Construction Management Personnel Issues 3 Cr. Hrs.

Analysis of the construction industry and the people associated with it. Specific emphasis is on the unique characteristics of construction and how these characteristics affect people. Two lecture, two lab hours per week.

Prerequisite(s): CCT 240

245 Soil Mechanics 4 Cr. Hrs.

Theories of soil mechanics including soil classifications, sampling and testing methods, stress distribution, shearing resistance and strength of soils. Two lecture, four lab hours per week.

Prerequisite(s): CCT 105 and MET 198 and MET 203 or CCT 105 and ETD 198 and ETD 213

246 Topographic Drawing & Mapping 4 Cr. Hrs.

State-of-the-art software is used to develop topographic drawings. Information from data collectors will be downloaded to develop databases for the creation of profiles, cross sections, and volumes. Two lecture, four lab hours per week.

Prerequisite(s): CCT 102 and CCT 103 and DRT 198 and MAT 131 or CCT 102 and CCT 103 and ETD 199 and MAT 131 or equivalent math score

247 Highway Surveying & Design**3 Cr. Hrs.**

Design and surveying concepts of highways including horizontal and vertical alignment along with principles of open channel flow including storm sewers and culverts. Two lecture, two lab hours per week.

Prerequisite(s): CCT 246 and MAT 132

248 Advanced Construction Layout**3 Cr. Hrs.**

Solving complex surveying problems for construction layout of buildings, sites and roads using appropriate mathematical calculations and surveying equipment. Two lecture, two lab hours per week.

Prerequisite(s): ARC 138 and CCT 203

256 Construction Management**3 Cr. Hrs.**

Inter-relationships and operations of a construction firm with a simulation of the management process by student teams demonstrating management skills required to succeed in business today. Finance, accounting, marketing and sales will be examined. Two lecture, two lab hours per week.

Prerequisite(s): CCT 103 and CCT 105 and MET 198 or CCT 103 and CCT 105 and ETD 198 and either ARC 138 or ARC 101 and ARC 105

258 Project Management Techniques**3 Cr. Hrs.**

Theory, nomenclature and practical applications of management techniques using computer software. Practical planning and project control with critical path methods, financial planning and cost control. Two lecture, two lab hours per week.

Prerequisite(s): MAT 132 and CCT 216 or ETD 121

270 Civil Engineering Technology**Internship R 1 - 12 Cr. Hrs.**

Earn credits toward degree requirements for work learning experience. Students establish learning objectives and prepare related reports and/or projects.

278 Civil Engineering Technology**Capstone 4 Cr. Hrs.**

Assessment of achievement by Civil Engineering Technology students in attaining program outcomes by completing a project demonstrating principles and practices of the major. Teamwork on projects will be emphasized. One lecture, six lab hours per week.

Prerequisite(s): CCT 245 and CCT 203 and CCT 258 and MET 207 or CCT 245 and CCT 208 and CCT 258 and ETD 222

297 Special Topics in Civil Engineering Technology R 1 - 6 Cr. Hrs.

Varied content offerings of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom/ seminar setting or in a non-traditional format such as TV, videotape, etc.

Prerequisite(s): Permission of instructor

Chemistry (CHE)**116 Introduction to Scientific****Glassblowing R 1 Cr. Hr.**

Basic operations used in scientific glassblowing emphasizing design, construction, and repair of simple scientific apparatus. Three lab hours per week.

120 Introduction to Chemistry 4 Cr. Hrs.

Surveys chemistry for allied health, non-science and elementary education majors. Atomic theory, periodic law, chemical bonding, nomenclature, basic chemical calculations, states of matter, solutions, acids and bases, and nuclear chemistry. Three lecture; two lab hours per week (CHE 126).

Prerequisite(s): DEV 085

121 Introduction to Organic Chemistry**4 Cr. Hrs.**

An introduction to alkanes, alkenes, alkynes, aromatic hydrocarbons, alkyl halides, aldehydes, ketones, alcohols, ethers, amides, carboxylic acids, amines, esters, stereoisomerism, polymers, and compounds containing phosphorous and sulfur. Three lecture, three lab hours (CHE 127) per week.

Prerequisite(s): CHE 120

122 Introduction to Biochemistry**4 Cr. Hrs.**

Introduces organic functional groups, nomenclature, carbohydrates, lipids, proteins, enzymes, metabolism of carbohydrates, lipids and proteins, heredity and protein synthesis, vitamins and hormones, chemistry of body fluids. Three lecture, three lab hours (CHE 128) per week.

Prerequisite(s): CHE 120

126 Lab for CHE 120

Laboratory must be taken with CHE 120.

127 Lab for CHE 121

Laboratory must be taken with CHE 121.

128 Lab for CHE 122

Laboratory must be taken with CHE 122.

131 Technical Chemistry I 4 Cr. Hrs.

An applied chemistry course for students in Engineering Technology. Topics considered include atomic structure, elements, compounds, the periodic table, chemical bonding, nomenclature, chemical reactions, chemical calculations, the states of matter, equilibria, acids and bases, oxidation reduction reactions, electrochemistry, and elementary organic chemistry. Three lecture, three lab hours (CHE 137) per week.

Prerequisite(s): MAT 102 or MAT 103

134 Environmental Analytical Chemistry 4 Cr. Hrs.

Field data acquisition techniques; separation techniques, volumetric techniques, gravimetric techniques, gas and high pressure chromatographic techniques, atomic absorption techniques of analysis; and statistical methods using EPA protocols. Two lecture, six lab hours per week.

Prerequisite(s): CHE 121

137 Lab for CHE 131

Laboratory must be taken with CHE 131.

139 Lab for CHE 134

Laboratory must be taken with CHE 134.

141 College Chemistry I 4 Cr. Hrs.

A University Parallel course in chemistry for the non-science major. Atomic theory, the periodic law, chemical bonding, kinetics and equilibrium, nuclear chemistry and energy. Three lecture hours, two lab (CHE 147) hours per week.

Prerequisite(s): DEV 085

142 College Chemistry II 4 Cr. Hrs.

A continuation of CHE 141. Acids and bases, oxidation and reduction, sources of inorganic materials, organic chemistry and industrial applications, polymer chemistry, and biochemistry. Three lecture hours, two lab (CHE 148) hours per week.

Prerequisite(s): CHE 141 or CHE 120 or CHE 151

143 College Chemistry III 4 Cr. Hrs.

A continuation of CHE 142. The chemistry of water, the atmosphere, agriculture, nutrition, medicine, household chemistry, transportation chemistry, and the chemistry of imaging. Three lecture, two lab (CHE 149) hours per week.

Prerequisite(s): CHE 142

147 Lab for CHE 141

Laboratory must be taken with CHE 141.

148 Lab for CHE 142

Laboratory must be taken with CHE 142.

149 Lab for CHE 143

Laboratory must be taken with CHE 143.

151 General Chemistry I 5 Cr. Hrs.

A university parallel course in chemistry for science and engineering majors. Atomic theory, periodic law, chemical bonding, nomenclature, stoichiometry, and elementary organic chemistry. Four lecture, three lab hours per week (CHE 157).

Prerequisite(s): MAT 102 or MAT 103

152 General Chemistry II 5 Cr. Hrs.

A continuation of CHE 151. Emphasis is placed on the study of ideal and non-ideal states of matter: gases, solids, liquids, solutions and colloids, thermodynamics, kinetics and basic equilibria. Four lecture; three lab hour (CHE 158) per week.

Prerequisite(s): CHE 151 and MAT 116 or MAT 132

153 General Chemistry III 5 Cr. Hrs.

A continuation of CHE 152. An in-depth study of applied equilibria, pH, electrochemistry, and nuclear chemistry. The descriptive chemistry of selected elements is discussed and a chemically oriented industry is toured. In addition to the above topics, qualitative analysis, gas chromatography, and visible IR and atomic absorption spectroscopy are studied in the laboratory. Three lecture, six lab hours (CHE 159) per week.

Prerequisite(s): CHE 152

157 Lab for CHE 151

Laboratory must be taken with CHE 151.

158 Lab for CHE 152

Laboratory must be taken with CHE 152.

159 Lab for CHE 153

Laboratory must be taken with CHE 153.

201 Organic Chemistry I 5 Cr. Hrs.

Alkanes, stereochemistry, alkyl halides, organometallic compounds, alcohols, ethers, and epoxides.

Prerequisite(s): CHE 153

202 Organic Chemistry II 5 Cr. Hrs.

Alkenes, alkynes, aromatic hydrocarbons, aldehydes, ketones, carboxylic acids, and spectroscopic methods of organic analysis. Four lecture, three lab hours (CHE 208) per week.

Prerequisite(s): CHE 201

203 Organic Chemistry III 5 Cr. Hrs.

Derivatives of carboxylic acids, enolates, carbanions, amines, polycyclic and heterocyclic aromatic compounds, pericyclic reactions, polymers, composite materials, and biochemistry. Four lecture, three lab hours (CHE 209) per week.

Prerequisite(s): CHE 202

207 Lab for CHE 201

Laboratory must be taken with CHE 201.

208 Lab for CHE 202

Laboratory must be taken with CHE 202.

209 Lab for CHE 203

Laboratory must be taken with CHE 203.

211 Analytical Chemistry I 4 Cr. Hrs.

Traditional techniques of chemical analysis including gravimetric, volumetric, precipitation and selected topics in spectroscopy and electrochemistry. Two lecture, six lab hours (CHE 217) per week.

Prerequisite(s): CHE 143 or CHE 153

212 Analytical Chemistry II 4 Cr. Hrs.

Traditional instrumental analysis including: colorimetry, infrared, ultra-violet, visible, atomic absorption and various chromatographic methods. Two lecture, six lab hours (CHE 218) per week. Primarily for the associate degree student.

Prerequisite(s): CHE 211

217 Lab for CHE 211

Laboratory must be taken with CHE 211.

218 Lab for CHE 212

Laboratory must be taken with CHE 212.

245 Concepts in Chemistry 5 Cr. Hrs.

Basic concepts and applications including matter, physical states and changes, periodicity, compounds and bonding, chemical changes, solutions and electrolytes, acids and bases, oxidation and reduction, and organic chemistry. Applications use an inquiry learning environment which emphasizes science process skills integrated with mathematics. Early childhood education majors only. Does not satisfy chemistry requirement for middle childhood education majors. Four lecture, three lab hours per week.

Prerequisite(s): ASE 145, MAT 142 or MAT 110 or equivalent

270 Chemistry Internship

R 2 - 12 Cr. Hrs.

The internship is designed to support a variety of experiential learning needs. Adult learners with extensive learning from prior experience may receive acknowledgment of that learning with internship credit upon submission of a portfolio to an evaluation committee. Younger students with limited experience will participate in selected non-classroom experiences with relationship to their educational needs. Students already working full or part time may apply to use that experience in fulfillment of the internship requirement. For the latter two types of students, learning outcomes are established and related reports and/or projects are submitted each quarter.

297 Special Topics in Chemistry

R 1 - 6 Cr. Hrs.

To provide opportunities to receive credit for non-traditional courses such as courses by TV and newspaper as well as special interest topics in the discipline; objectives will vary with the particular content area. Course is repeatable as topics change.

Chinese (CHN)**100 Conversational Chinese 3 Cr. Hrs.**

Basic conversational skills through situational dialogues and command of the phonic pinyin system and essential idiomatic expressions. Mastery of written Chinese characters is not required.

105 Conversational Chinese II 3 Cr. Hrs.

Advanced conversational skills through situational dialogues and idiomatic expressions within complex cultural settings. Mastery of written Chinese characters is not required.

Prerequisite(s): CHN 100

Computer Information Systems (CIS)**100 CIS Student Orientation for Success 2 Cr. Hrs.**

An introduction to Sinclair Community College services, the Computer Information Systems (CIS) department, and the career field of Information Technology (IT). Provides an opportunity to acquire and adopt methods to support student success in college. Emphasis on the development of practical knowledge, skills and information needed to assist learners in the attainment of career goals.

101 Computer Networks & Security 3 Cr. Hrs.

Information and skills needed to setup and provide minimum security for a personal and/or home office network. Includes detailed instructions on how to plan and set up home networks; router set up and programming (wired and wireless) are also addressed. This course prepares students for more advanced topics in securing business networks.

Prerequisite(s): BIS 105

107 Introduction to Operating Systems 3 Cr. Hrs.

Introduction to the current Windows desktop operating system Administrative Tools and various Control Panel applets used to manage Windows. Beginning and intermediate operating system commands as executed from a command prompt on a Windows system. An assessment of basic computer concepts, keyboarding, and mouse skills will be done upon entering the course. Students should possess keyboarding, mouse skills, and complete all Developmental Studies courses (DEV) prior to enrolling in this course. Recommend BIS 105 (or equivalent). Intended for CIS majors.

108 Introduction to Windows OS for the Network Manager 3 Cr. Hrs.

Introduces the current version of Windows operating system, including the graphical user interface, file manipulation, basic network operations and system administration. This course has a technical focus and is intended for CIS majors who have strong user level knowledge of Windows. It is assumed that students have keyboarding and mouse skills, and have completed all Developmental (DEV) requirements. An assessment of basic computer concepts, keyboarding and mouse skills will be done upon entering the course. Recommend BIS 105 and CIS 107 (or equivalent knowledge).

Prerequisite(s): BIS 105

111 Introduction to Problem Solving & Computer Programming 4 Cr. Hrs.

Introduction to logical problem solving techniques used in programming. The course focuses on developing problem solving and program design abilities. Topics covered include problem solving, structured design involving sequence, selection and repetition structures using both flowcharts and pseudocode, arrays and array processing, and application of the program development process: design, code, and test. Prerequisite: MAT 101 or higher. Recommended prerequisite: BIS 105 or equivalent.

Prerequisite(s): MAT 101 or MAT 116 or MAT 121 or MAT 102

112 Object Oriented Concepts 3 Cr. Hrs.

Introduction to software development using object oriented analysis and design. This methodology expresses solutions in terms of objects: self-contained entities composed of data and operations on that data. Classes, objects, encapsulation, inheritance, and polymorphism concepts will be presented. Various Object Oriented Analysis and Design (OOA & D) tools and models including Unified Modeling Language (UML) will be introduced. Students will apply their skills in mini design sessions.

Prerequisite(s): CIS 111

113 Object Oriented Design 4 Cr. Hrs.

The course presents the concepts and vocabulary of Object-Oriented Design, then investigates in detail the "three pillars" of object oriented programming: Inheritance, Encapsulation, and Polymorphism. Design case studies are an essential component of this course.

Prerequisite(s): Approval of chairperson and five or more years of programming experience or equivalent education and experience.

130 Introduction to Web Development 3 Cr. Hrs.

Introductory study of the web design and development process. Students will use web authoring software to create, edit and update web pages. Emphasis is on creating web pages for a business environment.

Prerequisite(s): BIS M71

131 Intermediate Web Development 3 Cr. Hrs.

This course focuses on the design principles for information web sites with a focus on the end user. Key web standards will be used, such as XHTML and CSS. Students will create and publish several web sites and present those sites for critique of the class.

Prerequisite(s): CIS 130 and CIS 136

134 Macromedia Flash 3 Cr. Hrs.

Development of interactive, animated, digital creations appropriate for disk, CD or web delivery. The primary authoring tool is Macromedia's Flash with other authoring tools being reviewed. The course is best described as a community of learners who develop collaborative project skills as they develop Flash expertise.

Prerequisite(s): CIS 130

136 Introduction to XHTML 3 Cr. Hrs.

Introduction to Extensible HyperText Markup Language (XHTML) and design issues involved in creating documents for distribution on the World Wide Web. The standard XHTML tags will be covered, including basic formatting, headers, body attributes, page layout, links, tables, frames, forms, and style sheets.

Prerequisite(s): OIS M71 or BIS M71 or CIS M71

137 Introduction to JavaScript 3 Cr. Hrs.

Introduction to the JavaScript programming language that is used to create dynamic, interactive effects on web pages. Standard programming language concepts will be covered, including variables, branching, looping, functions, and parameter passing. Projects will include pop-up windows, scrolling messages, validating forms, and cookies.

Prerequisite(s): CIS 136 and CIS 111 or equivalent

138 Advanced Macromedia Flash 3 Cr. Hrs.

Expansion of the skill set taught in CIS134 by designing more advanced, interactive web sites and by developing web projects that incorporate the more complex Flash techniques including ActionScripting and forms. The primary authoring tool is Macromedia's Flash. Other authoring tools will be reviewed. The course is best described as a community of learners who develop collaborative project skills as they develop Flash expertise.

Prerequisite(s): CIS 134

143 Cold Fusion Markup Language 3 Cr. Hrs.

Introduction to the Cold Fusion Markup Language (CFML) technology for use in the development of dynamic, database driven web sites. Students will be introduced to the CFML tags then develop Cold Fusion web applications that interact with users, query and update databases, generate dynamic content, create session and client variables, and interact with the web server.

Prerequisite(s): CIS 129 or CIS 136, CIS 111 and CIS 265

144 PERL Common Gateway Interface 3 Cr. Hrs.

Introduction to the PERL scripting language used to develop Common Gateway Interface (CGI) programs that generate HTML. Students will be introduced to PERL language constructs, learn to use the command line debugger, and code PERL applications that use regular expressions, PERL modules with CGI.pm and perldoc. The basics of CGI environment variables and form processing will be covered. Students will learn how to set up a web server to host CGI programs that deliver HTML content.

Prerequisite(s): CIS 129 or CIS 136 and CIS 137, CIS 111 and CIS 265

147 Visual Basic.Net Programming I 3 Cr. Hrs.

Development and implementation of event driven, object oriented programs for graphical user interfaces within the Windows environment using the Visual Basic .NET programming language. Learning outcomes include: using the Visual Basic .NET development environment, implementation of fundamental Visual Basic .NET control objects and an introduction to ADO controls; use of selection and repetition programming structures, manipulating data obtained through user input, sequential files, random access files and arrays; implementation of modular programming through use of sub and function procedures; string data manipulation through VB .NET properties, methods and statements; how to set up and print formal business reports, and an introduction to the development and implementation of user interfaces to a database.

Prerequisite(s): CIS 111, CIS 112 and CIS 107 or CIS 108

148 Advanced Visual Basic.Net 4 Cr. Hrs.

Advanced programming in the Visual Basic .NET environment. Primary topic is developing Windows based user interfaces to relational databases. Other topics include the use of Visual Basic .NET system classes along with creating user defined classes in applying object oriented design and programming techniques, web forms with ASP.NET, and accessing databases with web forms.

Prerequisite(s): CIS 147

162 Microsoft Office Troubleshooting & Problem Solving 3 Cr. Hrs.

Introduction to troubleshooting and problem solving techniques for Microsoft Office. Review of the major components of the complete Office package. Real-world cases help the students to develop critical thinking skills in evaluating needed computer support while focusing on avoiding or preventing software problems. The students work with integration of networks and web as used in the software.

Prerequisite(s): BIS 160 or BIS M41 and BIS M51 and BIS M61

164 Introduction to User Support **3 Cr. Hrs.**

Introduction to the skills and abilities required to provide technical support and assistance to computer users. Emphasis is on customer service, problem solving and communication skills (needs analysis, troubleshooting and interaction with users). Topics include service concepts, skill sets, career paths, strategies to provide technical support and operations of the help desk and user support industry.

Prerequisite(s): CIS 107

166 User Support Tools & Techniques **3 Cr. Hrs.**

An in-depth look into the business processes for user support, including processes and procedures for using help desk tools and technologies to determine and resolve typical help desk and user support problems.

Prerequisite(s): CIS 164

200 Fundamentals of Programming a Firewall **4 Cr. Hrs.**

Information and skills needed to program a state-of-the-art firewall to secure a small office and/or home office network. Includes detailed instructions in the planning, setup, and programming of small Cisco IOS-based PIX firewalls; also prepares students for more advanced topics in securing branch and corporate office networks. Other manufacturers or models may be used in lieu of the PIX 501.

Prerequisite(s): CIS 242 or equivalent

201 Wireless Network Administrator **4 Cr. Hrs.**

Planning, installing and maintaining a wireless network. Included will be topics necessary for the successful completion of both vendor neutral and vendor specific wireless certifications.

Prerequisite(s): CIS 230 or CIS 241

206 Network Security I **3 Cr. Hrs.**

A current overview of both network and Internet based security practices and conventions. Includes planning, implementing, and managing network security. Through an exploration of security technologies, vulnerability assessment and attack methods, this course addresses how to minimize potential security risks. Preparation will also be given for the Security+ certification.

Prerequisite(s): CIS 230 or CIS 241, CIS 108 or CIS 271 equivalent knowledge such as TCP/IP networks and network operating systems.

207 Network Security II **3 Cr. Hrs.**

An advanced course in network and Internet based security practices and conventions. Includes advanced level planning, implementing, and managing network security. Also includes detailed study of security risks and responses. Preparation will also be given for the Security+ certification.

Prerequisite(s): CIS 206 working knowledge of TCP/IP networks and other network operating systems.

210 Computer Systems Analysis **3 Cr. Hrs.**

Life cycle of computer information systems, emphasizing the requirements, methodology, and skills related to systems specification, design and documentation. May require lab time outside of class.

Prerequisite(s): CIS 111

221 COBOL I **3 Cr. Hrs.**

Syntax and grammar of the COBOL language; structured design and documentation. Programming assignments require lab time outside of class.

Prerequisite(s): CIS 111

222 COBOL II **3 Cr. Hrs.**

Advanced COBOL programming; table-handling and multiple file handling techniques; interactive program development and interaction with data bases. Programming assignments require lab time outside of class.

Prerequisite(s): CIS 221

223 Extensible Markup Language **3 Cr. Hrs.**

Introduction to the Extensible Markup Language (XML) for data exchange and document publishing. Topics including Extensible Style Sheet Language (XSL), Document Type Definitions (DTD), Document Object Model (DOM), and Simple Application Programming Interface for XML (SAX). Students will apply their knowledge by creating a simple e-commerce application.

Prerequisite(s): CIS 111, CIS 265 and CIS 129 or CIS 136 and CIS 137

224 Web Server Administration & Security **4 Cr. Hrs.**

Introduction to the technical skills needed to install, configure and maintain a secure web server. Topics include web directories and permissions, user accounts and documents, client and server security, secure online transactions, and intrusion detection and recovery.

Prerequisite(s): CIS 131 or CIS 141 or CIS 143 or CIS 144 or CIS 284 or CIS 285

225 Operating Systems Troubleshooting **3 Cr. Hrs.**

Introduction to theoretical and practical concepts related to modern, personal computer (P.C.) operating systems. Includes functions and characteristics of current operating systems in common use. Lab projects will be assigned.

Prerequisite(s): CIS 107

229 Advanced JavaScript **3 Cr. Hrs.**

This course introduces the student to the more advanced topics of JavaScript and provides more in depth knowledge of the JavaScript language. The student is introduced to the JavaScript Object model and events that are used to interact with the user.

Prerequisite(s): CIS 136 and CIS 137 or CIS 129, CIS 111 and CIS 130

230 Computer Networks **3 Cr. Hrs.**

Fundamentals of network and data communication including protocols, hardware, software, and local and area wide networks with emphasis on network analysis, design, management, and applications balances technical aspects of both data communications and managerial issues by incorporating current models such as the seven-layer Open Systems Interconnection (OSI) and Systems Network Architecture (SNA).

Prerequisite(s): CIS 107

231 Fundamentals of the Linux Operating System **3 Cr. Hrs.**

Linux operating system installation, management, administrative and troubleshooting techniques for beginning and intermediate students. Both the command line interface, with commonly used instructions, and a graphical interface will be used to manage and administer the Linux system. This class will help prepare students for industry or vendor specific certification exams.

Prerequisite(s): CIS 107

232 UNIX Shell Programming **3 Cr. Hrs.**

Advanced study of the UNIX Operating System for programmers including writing and debugging shell procedures, pipes and interprocess communications, and commands list. Assignments require lab time outside of class.

Prerequisite(s): CIS 231

233 C++ Programming I **4 Cr. Hrs.**

Introduction to the C++ programming language, building on prior introduction to programming studies. Topics include C++ syntax with its constructs, data types, logic and repetition structures, input/output methods, one-dimensional arrays, structures, and classes.

Prerequisite(s): CIS 111

234 C++ Programming II **4 Cr. Hrs.**

This course builds on the foundation of C++ studies covered in CIS 233. Introduction to object based and object oriented programming using C++, including data encapsulation and methods (abstract data type classes), class objects, constructors, destructors, operator overloading, inheritance, friends, virtual functions. Concepts addressed include searching-sorting, n-dimensional arrays, vectors, and pointers; programming assignments require additional time outside of class.

Prerequisite(s): CIS 233

236 C++ Programming III **4 Cr. Hrs.**

Advanced C++ programming: Basic data structures including recursions, lists, stacks, queues, trees, and to introduce analysis of simple algorithms. Enrolling students should already know the C++ programming language.

Prerequisite(s): CIS 234

237 Data Structures In Java 4 Cr. Hrs.

The course covers data structures, methods of organizing large amounts of data; and algorithm analysis, the estimation of the running time of algorithms. The goal of this course is to teach students good programming and algorithm analysis skills so that they can develop efficient programs.

Prerequisite(s): CIS 281 and MAT 116

238 P.C. Installation Management 3 Cr. Hrs.

Installing, configuring, maintaining and troubleshooting microcomputer hardware and software including CPU, storage devices, add-on boards and adapters, video displays, printers and communication devices, operating systems, and diagnostic software programs.

Prerequisite(s): CIS 107

240 Network Installation Management 3 Cr. Hrs.

Advanced networking concepts for designing, installing, and configuring computer network systems which include the effective use of hardware and network/application software for peer-to-peer and client/server environments. Students will demonstrate their working network solutions.

Prerequisite(s): CIS 230

241 Cisco Networking Fundamentals 7 Cr. Hrs.

First course in the four-course Cisco Certified Networking Associate (CCNA) sequence. Foundation skills needed for the mastering of the basic concepts of networking in an Internet/Intranet networking environment. Includes both hardware and software installation and management.

Prerequisite(s): CIS 107

242 Cisco Router Fundamentals 7 Cr. Hrs.

Second course in four-course sequence, building on the concepts of the Cisco Networking Fundamentals course (CIS241). Adds the fundamental concepts of router configuration and management, and basic router hardware and software components. Additional assignments will require lab time outside of class.

Prerequisite(s): CIS 241

243 Cisco Routing in LANs 7 Cr. Hrs.

Third course in four-course sequence, building on the concepts of previous courses. Topics include advanced router configurations, LAN switching theory, VLANs, advanced LAN and LAN switched design, Novell IPX, and threaded case studies. Additional assignments will require lab time outside of class.

Prerequisite(s): CIS 242

244 Cisco Routing in WANs 7 Cr. Hrs.

Fourth course in a four-course sequence, building on the concepts of previous courses. Topics include WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, Network troubleshooting, National SCANS Skills, and threaded case studies. Additional review and practice for the Cisco Certified Network Associate and the Network + industry standard exams. Additional assignments will require lab time outside of class.

Prerequisite(s): CIS 243

245 Remote Access for CCNP® 4 Cr. Hrs.

Building, configuring and troubleshooting a remote access network to interconnect central sites to branch offices and home offices. Also includes learning how to control access to the central site, as well as to maximize bandwidth utilization over the remote links. Part of the recommended learning path for students seeking the Cisco Certified Network Professional (CCNP)® certification

Prerequisite(s): CIS 244 or CCNA certification

246 Router Internetworking for CCNP® 4 Cr. Hrs.

Routing principles of both distance vector and link-state routing protocols; IP addressing techniques; the theory behind the various routing protocols; and configuration and troubleshooting information for each protocol. Includes hands-on exercises to practice configuration and troubleshooting knowledge and to acquire the skills necessary to configure protocols in customer networks. Part of the recommended learning path for students seeking the Cisco Certified Network Professional (CCNP)® certification.

Prerequisite(s): CIS 244 or CCNA certification

247 Multilayer Switching for CCNP® 4 Cr. Hrs.

Building campus networks using multilayer switching technologies over high speed Ethernet. Includes both routing and switching concepts, covering both Layer 2 and Layer 3 technologies. Includes hands-on lab exercises to practice configuration, apply troubleshooting knowledge, and acquire the skills necessary to configure these technologies in customer networks. Part of the recommended learning path for students seeking the Cisco Certified Network Professional (CCNP)® certification.

Prerequisite(s): CIS 244 or CCNA certification

248 Network Support & Troubleshooting for CCNP® 4 Cr. Hrs.

Baseline and troubleshooting in an environment using routers and switches for multiprotocol client hosts and servers connected with the various Local Area Network and Wide Area Network technologies. Includes methodical practice using IOS software and Catalyst software tools to diagnose and correct problems. Part of the recommended learning path for students seeking the Cisco Certified Network Professional (CCNP)® certification.

Prerequisite(s): CIS 244 or CCNA certification

251 php Web Programming 3 Cr. Hrs.

php Web programming language and php Web applications. Includes php program development by individuals and teams to modify and create larger php web applications as well as publishing and testing php programs and applications on a live web server.

Prerequisite(s): CIS 111 and CIS 137.

Recommended CIS 233 or CIS 280

253 Securing a Windows Network Environment 4 Cr. Hrs.

Provides students with the knowledge and skills to successfully plan, implement, and troubleshoot security for a Microsoft Windows network using the current version of the Microsoft Server operating system. Topics include implementing baseline security; managing software updates through service packs and updates; securing local and remote network access; managing a Public Key Infrastructure (PKI); monitoring and responding to security incidents. Prepares students for the industry standard certification exam. Assignments require lab time outside of the classroom.

Prerequisite(s): CIS 271, CIS 272 or equivalent knowledge

255 Securing a Unix/Linux Operating System 4 Cr. Hrs.

Introduction to the most common tools used to protect a UNIX/Linux Operating System environment from unauthorized use. In addition, the course provides an overview of vulnerable areas related to network security.

Prerequisite(s): CIS 231, CIS 232 or equivalent knowledge

257 Microsoft Internet Security & Acceleration (ISA) Server 4 Cr. Hrs.

Planning, implementing, installing and troubleshooting the current version of the Microsoft Windows firewall product (Internet Security and Acceleration Server). Various topologies, installation, configuration, and ISA hosting are also addressed. Prepares students for the industry standard certification exam related to this product. Assignments require lab time outside of the classroom.

Prerequisite(s): CIS 272

259 Designing Security for Windows Networks 4 Cr. Hrs.

Conceptual, logical and physical design of a network security infrastructure; includes analyzing business and technical requirements. Prevention, detection and isolation of various threats. Design of a public key infrastructure using Certificate Services; strategies for secure user authentication; operating system software update methods; security of data transmission using IPSec policies and virtual private networks (VPNs); securing wireless communication; and specific security requirements for various enterprise services, e.g., web, database and mail servers.

Prerequisite(s): CIS 272 and CIS 273 and CIS 274

260 Microsoft Exchange Server 4 Cr. Hrs.

Skills needed to install, configure and manage information systems that incorporate Microsoft Exchange Server. Topics will relate to installing, configuring and managing Exchange Server on a computer platform running a current Microsoft Windows Server operating system.

Prerequisite(s): CIS 272 and CIS 274

264 A+ Certification 3 Cr. Hrs.

Installing, configuring, upgrading, maintaining and troubleshooting microcomputer hardware and software including CPU, storage devices, add-in boards and adapters, video displays, printers and communication devices. This course will prepare students for the CompTIA A+ Certification Exam. A+ Certification is a testing program sponsored by the Computing Technology Industry Association (CompTIA) that certifies the competency of service technicians in the computer industry.

Prerequisite(s): CIS 225 and CIS 238

265 Database Management Systems 3 Cr. Hrs.

Introduction to application development in a database environment. Discussion of data structure and database models. Discussion of database administration and analysis (design and implementation). An explanation and comparison of the various database models: relational, network, and hierarchical. Students will design and develop a simple database and implement a small portion of this project. Project requires lab time outside of class.

Prerequisite(s): CIS 111 or OIS M69 or BIS M32 or CIS M69

266 Client/Server Database 4 Cr. Hrs.

Introduction to application development in a client/server database environment. Discussion of data structures and database models; database planning, design, administration and analysis. An explanation and comparison of the various database models: object, relational, network, and hierarchical. Discussion of a methodology for conceptual, logical and physical design

for relational systems. Requires lab time outside of class.

Prerequisite(s): CIS 113 or CIS 111 and BIS M31

268 Introduction to Oracle: SQL & PL/SQL 3 Cr. Hrs.

Introduction to Oracle DBMS in a client/server environment. The course covers SQL and PL/SQL programming languages. Students are taught to create and maintain database objects and to store, retrieve and manipulate data. Students learn to create PL/SQL blocks of application code that can be shared by multiple forms, reports and data management applications.

Prerequisite(s): CIS 265 or CIS 266

270 CIS Internship R 1 - 9 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

271 Administering a Microsoft Windows Client Operating System 4 Cr. Hrs.

Installing and administering systems that incorporate the current Microsoft desktop operating system. Administering shared resources including files, folders and printers; installing, managing and troubleshooting hardware devices; monitoring and optimizing system performance and reliability; implementing network protocols and configuring security elements.

Prerequisite(s): CIS 230, CIS 107

272 Microsoft Windows Server Operating System 4 Cr. Hrs.

Intermediate and advanced aspects of the administration and support functions of a Windows Server administrator. Outcomes include installation and setup of the current Windows Server operating system, setup and administer a client server network and in-depth knowledge of the current Windows Server operating system. Prepares students for the industry certification exam. Assignments require lab time outside of class.

Prerequisite(s): CIS 230 and CIS 271, CIS 107

273 Managing a Windows Network Infrastructure 4 Cr. Hrs.

Intermediate and advanced aspects of the administration and support functions of a Windows network infrastructure using the current Windows Server operating system. Focus on the ability to install, manage, monitor, configure, and troubleshoot DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a Windows network. Prepares students for the industry certification exam. Assignments require lab time outside of class.

Prerequisite(s): CIS 272

274 Windows Directory Services Administration 4 Cr. Hrs.

Provides students with the knowledge and skills to successfully plan, implement, and troubleshoot a Microsoft Windows Active Directory® infrastructure using the current version of the Microsoft Server operating system. The course focuses on a Windows directory service environment, including forest and domain structure, Domain Name System (DNS), site topology and replication, organizational unit structure and delegation of administration, Group Policy, and user, group, and computer account strategies. Prepares students for the industry standard certification exam. Assignments require lab time outside of the classroom.

Prerequisite(s): CIS 272

275 Designing Windows Active Directory & Network Infrastructure 4 Cr. Hrs.

Intermediate and advanced aspects of the design and support functions of Windows Active Directory (AD) Services and Network Infrastructure. Focus is on the ability to design and analyze Directory Services architecture and Network Services requirements. Prepares students for the industry certification exam. Assignments require lab outside of classroom.

Prerequisite(s): CIS 274 and CIS 273

277 Planning a Windows Network Infrastructure 4 Cr. Hrs.

The analysis of existing and planned business models and their implications for a network design is presented. Fault tolerance and redundancy are discussed as important design objectives. Major elements of a network infrastructure are examined in detail including network topology; routing; Internet Protocol (IP) addressing; name resolution services; virtual private networks (VPNs); and remote access. Heavy emphasis on planning a network design using the current Windows Server operating system. Prepares students for the industry certification exam.

Prerequisite(s): CIS 272, CIS 273

278 CIS Capstone 4 Cr. Hrs.

Assessment of skills and competencies by CIS students through project based activities. Demonstration of achievement of degree option outcomes via oral and written presentations and creation of a professional growth plan. Course should be taken in the last quarter prior to graduation. Three lecture, two lab hours per week.

Prerequisite(s): Counselor's signature required

279 Microsoft SQL Server Administration 4 Cr. Hrs.

Provides skills and resources needed to install, configure and administer MS SQL Server. Outcomes include installation and setup of the MS SQL Server; setup and administration of a client server database and an in-depth knowledge of the MS SQL Server Database Application and its application interfaces and client tools. This course also prepares students for the Microsoft certification exam.

Prerequisite(s): CIS 272

280 Java Programming I 4 Cr. Hrs.

The course covers the basics of Java programming and object oriented software. Objects, attributes, and methods in Java are covered. The basics of programming structures are covered: selection, looping and arrays.

Prerequisite(s): CIS 111 and CIS 112

281 Java Programming II 4 Cr. Hrs.

A continuation of the Java Programming I course, delving more deeply into the basics of Java programming and object oriented software. Classes, object families, menus, graphics, sound, the AWT, streams, files, data structures and utility classes, threads, and networking.

Prerequisite(s): CIS 280

283 Advanced Java 4 Cr. Hrs.

Accelerated course in the Java programming language designed for professional programmers wishing an accelerated course which combines the content of CIS 280 (Java Programming I) and CIS 281 (Java Programming II). Included is most of the material in the Sun Java Programmer Certification and part of the Sun Java Developer Certification.

Prerequisite(s): CIS 113

284 Client/Server Web Tools 3 Cr. Hrs.

Designing, writing and deploying web-based n-tier applications using current development tools such as Microsoft Visual InterDev. Topics include: HTML, JavaScript, cookies, session variables, server-side scripting, ODBC, and Data Objects. Extensive lab exercises reinforce course topics. Students will design, create and deploy a small e-business web site.

Prerequisite(s): CIS 111 and OIS M68 or CIS 265

285 Web Application Development with Java 4 Cr. Hrs.

Designing, writing and deploying web-based n-tier applications using Java related technologies. Topics include: HTML, JavaScript, cookies, session variables, Java Servlets, JavaServer Pages, JDBC, Java Beans and XML Extensive lab exercises reinforce course topics. Students will design, create and deploy a small e-business web site.

Prerequisite(s): CIS 280 or CIS 283 and CIS 265 or CIS 266

286 Enterprise Java 4 Cr. Hrs.

Java technologies used in advanced network applications such as Enterprise Java Beans, distributed Servlets, RMI, JNDI, LDAP, Jini, and Java Spaces.

Prerequisite(s): CIS 283, CIS 285

288 Java Enterprise Development Project Seminar 5 Cr. Hrs.

Project based course where student teams propose, design, develop and implement a distributed Java application based on a set of requirements. Guest lecturers will provide insight on the latest Java Enterprise technologies.

Prerequisite(s): CIS 283, CIS 285

297 Special Topics in Computer Information Systems

R 0.5 - 7 Cr. Hrs.

Provides opportunities to receive credit for special interest topics within the discipline. Brief description of topics will be given and prerequisites identified when course is offered. Some lab time outside of class may be required.

299 Final Programming Project 4 Cr. Hrs.

Small groups complete a systems development project. Assignments require lab time outside of class. Three lecture, two lab hours per week.

Prerequisite(s): CIS 210, CIS 222, CIS 265, COM 211

M72 Cyber Security Tools 1 Cr. Hr.

Intermediate aspects of the World Wide Web, Internet, electronic tools and virtual libraries with emphasis on the ability to use various electronic tools such as academic portals and specialized databases; determining secure modes of electronic research and communication; securing electronic documents, e-mail, and personal computers. Also examines cyber-user vulnerabilities and risk factors. Assignments may require lab time outside of class.

Prerequisite(s): BIS 105, BIS M71

M73 Cyber Ethics 1 Cr. Hr.

A thoughtful examination of legitimate use of information found on the Internet. Includes practical application of ethical questions and issues regarding computer and Internet use. Privacy in cyberspace is examined as well as employer/employee cyberspace related security expectations. Appropriate for any major. Assignments may require lab time outside of class.

Prerequisite(s): BIS 105, BIS M71

Communication Arts (COM)**201 Introduction to Mass Communication 3 Cr. Hrs.**

History, practices, and functions of the press, television, radio, film, advertising, digital media and public relations. Investigates mass media's influence on modern society. An extensive examination of media theory and social effects is at the heart of the course.

Prerequisite(s): DEV 065 and DEV 110, or any college level English course

206 Interpersonal Communication 3 Cr. Hrs.

This course focuses on the development of effective verbal and non-verbal interactions between two people, stressing better methods of initiating and maintaining effective communication with and understanding of others through learning and applying interpersonal communication theory.

Prerequisite(s): DEV 065 and DEV 110 or any college level English course

211 Effective Public Speaking 3 Cr. Hrs.

Designed to improve speaking and listening skills through the study and application of public speaking structure, content, and style.

Prerequisite(s): DEV 065 and DEV 110, or any other college level English course.

212 Advanced Public Speaking 3 Cr. Hrs.

Speech composition with emphasis on research and factors important to delivery in securing a desired audience response. Presentations recorded for analysis.

Prerequisite(s): COM 211

215 Oral Interpretation 3 Cr. Hrs.

Development of the skills necessary to read literature aloud. Techniques for presenting prose, poetry, and dramatic selections will be studied and performed.

225 Small Group Communication 3 Cr. Hrs.

Focusing on development of effective small group decision making and leadership skills, and stressing better methods of expressing oneself and understanding others through learning group communication, theory and participating in small group decision making experiences.

Prerequisite(s): DEV 065 and DEV 110, or any college level English course

227 Principles of Persuasion 3 Cr. Hrs.

Examination of political and product campaigns, social movements, and elements of popular culture that contain messages designed to influence the general population; emphasis upon the use and development of persuasive appeals.

Prerequisite(s): DEV 065 and DEV 110, or any college level English course

230 Nonverbal Communication**3 Cr. Hrs.**

Development of effective nonverbal communication skills for the successful communicator, stressing better methods of expressing oneself and understanding others through the learning of the nonverbal theory, Impression Management.

Prerequisite(s): COM 206 or COM 225

235 Principles of Interviewing**3 Cr. Hrs.**

Development of theoretical understanding and effective skills in the interviewing process, as both interviewer and interviewee. Practical experience in key types of interviews including problem solving, appraisal, informational, and employment interviews.

Prerequisite(s): DEV 065 and DEV 110, or any college level English course

245 Intercultural Communication**3 Cr. Hrs.**

Analysis of issues associated with communicating across cultures, including study of communication norms characteristic of major contemporary cultures and emphasizing effective cross-cultural communication in interpersonal and organizational contexts.

Prerequisite(s): DEV 065 and DEV 110, or any college level English course

265 Communication & Conflict**3 Cr. Hrs.**

A systematic examination of the theoretical factors that contribute to the entire conflict process with a major focus on the role of how the communicative process affects the conflict event. Special attention will be given to the critical analysis of participant behavior during selected conflict events.

Prerequisite(s): DEV 065 and DEV 110, or any college level English course, and COM 206

270 Communication Internship**R 1 - 12 Cr. Hrs.**

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

278 Communication Capstone 1 Cr. Hr.

Demonstration of communication skills and competencies through the development of a communication skills portfolio; independent activity under the direction of a Communication Arts faculty.

Prerequisite(s): COM 201 and COM 206 and COM 211 and COM 225

285 Business & Professional Communication**3 Cr. Hrs.**

Principles and skills of effective face-to-face communication in business and professional settings; on-the-job communication skills that enhance success for individuals and the organization.

286 Public Relations Principles**3 Cr. Hrs.**

Principles and skills of public relations in organizations and in society, integrating organizational communication and management practices.

287 Effective Listening**3 Cr. Hrs.**

Development of effective listening skills. Practical experience in comprehensive, empathic, critical, and appreciative listening. Solid foundation in relevant listening theory.

Prerequisite(s): DEV 065 and DEV 110 or any college level English course

290 Introduction to Broadcasting**3 Cr. Hrs.**

Survey of the history, current issues and trends of commercial and public broadcasting including government regulations and philosophy, structure and general operation of the broadcasting industry.

295 Independent Study in Communication**R 1 - 3 Cr. Hrs.**

Independent exploration of issues, problems and/or areas of special interest in the field of communication under the direction of the Communication faculty. Open only to second year students. May be repeated but not to exceed three (3) credit hours.

297 Special Topics in Communication**R 1 - 6 Cr. Hrs.**

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

Community Based Corrections (COR)**101 Corrections Ethics****3 Cr. Hrs.**

This course is designed to give correctional officers an understanding of the challenges, expectations, and demands of this occupation. Ethical behavior, along with professionalism, and the critical nature of following appropriate standards will be emphasized.

102 Crisis Intervention**3 Cr. Hrs.**

The purpose of this course is to enable the correctional staff to take necessary measures to develop a comprehensive riot control plan for their institution, and to implement appropriate responses to maintain order and restore peace to the institution in a legal and human fashion.

103 Legal Issues in Correctional Institutions**3 Cr. Hrs.**

This course is designed to help the correctional officer understand the many legal issues he or she may face while working in correctional institutions. Topics include suicide prevention, conditions of confinement, use of force, and the right to exercise or practice one's religion. These are just a few of the issues commonly litigated today that were not considered by inmates or correctional administrators thirty years ago.

104 Written Communications in Corrections**3 Cr. Hrs.**

This course is a practical experience in preparing the diverse forms, notes and reports that accompany correctional work. Emphasis is on specific skills necessary for accurately completing these writing tasks.

105 Alternatives to Prison**3 Cr. Hrs.**

Alternatives to incarceration involving community based programs, diversion strategies, pre-institutional substitutes, post-institutional programs, drug and alcohol programs, contemporary probation and parole, political problems in corrections, funding sources for community programs, and role of the community.

106 Introduction to Corrections**3 Cr. Hrs.**

This course is designed to give the new correctional worker an understanding of the demanding daily work load within the institutional setting. The critical issues affecting security, custody control, and institutional programs will be emphasized so that the student will know the interaction of the various organizational components within the institution.

126 Correctional Services in the Community**3 Cr. Hrs.**

Community resources that can be used in the correctional task (both diversionary and rehabilitative). On-the-scene examination or an orientation by an expert from each prominent resource.

190 Corrections Workshop**R 1 - 6 Cr. Hrs.**

Workshops offered as part of Sinclair's continuing education program for persons in and interested in the criminal justice system. Will be offered throughout the academic year in a variety of subject areas and for varying lengths of time. May be repeated for credit as topic changes.

205 Law & the Juvenile Offender**3 Cr. Hrs.**

The juvenile justice system and the laws that protect the alleged delinquent. The rights and non-rights of juveniles, philosophy and goals of the juvenile court and its programs, and the community attitude toward delinquency.

206 Corrections 3 Cr. Hrs.

Reception, classification, program (job) assignment, and release. Jail programs that are or could be implemented are reviewed. Juvenile diversion, holding and detention facilities and practices, and the functions of the custodial staff are examined.

226 Contemporary Practices in Corrections 3 Cr. Hrs.

Modern trends in community based corrections. Some of the more advanced concepts and experiments, i.e., work-release, half-way houses, school-release, family conjugal visits, and others are analyzed and evaluated.

270 Corrections Internship R 1 - 6 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

295 Corrections Seminar 3 Cr. Hrs.

Identification and analysis of current issues and problems within the field of corrections.

Prerequisite(s): Department signature

Dance (DAN)

105 Beginning Dance R 1 Cr. Hr.

Basic movement classes for students with no previous dance experience. Class work consists of placement exercises, combinations to improve flexibility, and movements common to ballet and modern dance. Two lab hours per week.

107 Jazz Workout R 1 Cr. Hr.

Basic jazz combinations for the non-dancer performed to popular and jazz music, designed to strengthen and stretch the body by developing correct alignment. Two lab hours per week.

110 Dance Workshop R 1 Cr. Hr.

Workshop developing skills in a specialized area of dance, with emphasis on technical competency, proper alignment, muscular strength, endurance, and flexibility.

120 Movement as Therapy R 3 Cr. Hrs.

Dance techniques, improvisations, and movement theories used therapeutically and pedagogically.

145 Dance Practicum R 1 Cr. Hr.

Perspectives of dance presentation emphasizing discipline over self, dedication to group, and responsibility to audience. Two lab hours per week.

155 Dance History 3 Cr. Hrs.

Historical development of dance from earliest beginnings to the Renaissance birth of ballet to the twentieth century emergence of modern dance.

157 Dance Appreciation 3 Cr. Hrs.

Introduction to dance from non-performing perspective focusing on its many artistic, theatrical and social forms relating to culture, other arts and the humanities.

170 Point Technique I R 1 Cr. Hr.

Classes in basic point technique. Two lab hours per week.

Prerequisite(s): DAN 272

172 Ballet I R 3 Cr. Hrs.

Basic fundamentals and theory of classical ballet for beginning students. Class work consists of barre work, center combinations and steps. Two lecture, two lab hours per week.

173 Modern Dance I R 3 Cr. Hrs.

Basic fundamentals and theory of modern dance for beginning students. Class work consists of floor exercises, combination of movements and basic steps.

174 Jazz I R 3 Cr. Hrs.

Basic fundamentals of jazz techniques. Class work consists of warm-up exercises, isolations and basic movements. Two lecture, two lab hours per week.

175 Tap Dance I R 3 Cr. Hrs.

Basic fundamentals of tap technique. Class work consists of warm-up exercises, isolations and basic movements. Two lecture, two lab hours per week.

176 Men's Technique Class R 1 Cr. Hr.

Ballet classes emphasizing the skills needed and required of the male dancer. Two lab hours per week.

178 Tech Theatre for Dancers 3 Cr. Hrs.

Survey of technical aspects of the theatre, including the technical vocabulary required to communicate the unique needs of dancers who are choreographing or performing in a variety of theater settings; and the expectations of theater personnel related to dance productions.

180 Music for Dancers R 3 Cr. Hrs.

Music fundamentals and concepts presented from a dance perspective to demonstrate sensitivities to music that will improve the quality of dancing.

204 Ballet Pedagogy R 1 Cr. Hr.

For intermediate second year students, this course pursues the techniques and goals of learning how to teach dance, the relation of music structure to dance, and the problems of dance production as it pertains to ballet. Two lab hours per week.

Prerequisite(s): Co-requisite DAN 272 or intermediate level skill

205 Modern Dance Pedagogy R 1 Cr. Hr.

For intermediate second year students, this course pursues the techniques and goals of learning how to teach dance, the relation of music structure to dance, and the problems of dance production. Two lab hours per week.

Prerequisite(s): Co-requisite DAN 273 or intermediate level skill

206 Jazz Pedagogy R 1 Cr. Hr.

For intermediate students, this course defines the techniques and goals needed for the teaching of jazz dance. Content will include the structural relationship between music and dance, and the theatrical/technical aspects of a jazz performance. Two lab hours per week.

Prerequisite(s): Co-requisite DAN 274 or intermediate level skill

207 Dance Class Accompanying R 1 Cr. Hr.

Techniques essential for the accompanist's role in the dance class. Must audition using own intermediate level repertoire. Audition will consist of: 1. Playing one prepared piece (i.e. a Schubert waltz) 2. Sight reading one piece selected by instructor. Two lab hours per week.

241 Dance Composition I R 3 Cr. Hrs.

Rules and theory of basic dance composition.

242 Dance Composition II R 3 Cr. Hrs.

Continuation of the Dance Composition I, adding studies in improvisation, small groups, and further use of music with compositional forms.

Prerequisite(s): DAN 241

272 Ballet II R 3 Cr. Hrs.

Intermediate ballet level. Working knowledge of basic barre and center work required.

Prerequisite(s): DAN 172

273 Modern Dance II R 3 Cr. Hrs.

Intermediate modern level. Working knowledge of modern dance technique required.

Prerequisite(s): DAN 173

274 Jazz II R 3 Cr. Hrs.

Intermediate jazz dance level stressing techniques and styles needed for musical theatre performance. Two lecture, two lab hours per week.

Prerequisite(s): DAN 174

275 Tap Dance II R 3 Cr. Hrs.

Intermediate tap level stressing tap turns, rhythmic combinations and styles needed for musical theatre performance. Two lecture, two lab hours per week.

Prerequisite(s): DAN 175

297 Special Topics in Dance R 1 - 3 Cr. Hrs.

Varied content offerings of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom/ seminar setting or in a non-traditional format such as TV, video tape, etc.

R - Course may be repeated for credit. NOTE: See divisional sections for curriculum changes.

Dental Hygiene (DEH)

103 Head & Neck Anatomy 4 Cr. Hrs.

Gross anatomy of the head and neck region including the oral cavity. Three lecture, two lab hours per week.

Prerequisite(s): BIO 141, BIO 142

104 Dental Anatomy for Dental Auxiliaries 2 Cr. Hrs.

A study of form and function of the human dentition. Designed for dental care providers. One lecture and two lab hours per week.

105 Introduction to Dental Hygiene 2 Cr. Hrs.

This course provides students with historical, professional, legal and ethical aspects of the dental hygiene profession, and includes preventive dental health concepts; infection control; and related health and safety, commonly known as exposure control. Two lecture hours per week.

Prerequisite(s): BIO 141, BIO 142 and DEH 120 and ALH 104

106 Nutrition & Oral Health 3 Cr. Hrs.

Basic nutrition principles in dental hygiene care, including principles of nutrition, application of basic nutrition principles through the lifespan, nutritional aspects of oral health and disease, systemic disease and nutrition status, and nutrition assessment and counseling for the dental hygiene client.

Prerequisite(s): BIO 141, BIO 142

109 Lab for DEH 103

Laboratory must be taken with DEH 103.

111 Preclinical Dental Hygiene I 4 Cr. Hrs.

Scientific principles of dental hygiene with emphasis on data collection, client assessment, oral health education, and basic instrumentation. Practice of infection control standards and regulations are an integral component. Two lecture, six lab hours per week.

Prerequisite(s): DEH 103 and DEH 105

112 Preclinical Dental Hygiene II 4 Cr. Hrs.

Scientific principles of dental hygiene practice with emphasis on care planning and periodontal instrumentation. Two lecture, six lab hours per week.

Prerequisite(s): DEH 111

113 Clinical Dental Hygiene I 3 Cr. Hrs.

Skill developments focusing on the practitioner's ability to assess, diagnose, plan, implement, and evaluate dental hygiene care. Emphasis is placed on preventive and child patient care. One lecture, two clinic hours per week.

Prerequisite(s): DEH 112 and DEH 106

117 Lab for DEH 111

Laboratory must be taken with DEH 111.

118 Lab for DEH 112

Laboratory must be taken with DEH 112.

119 Lab for DEH 113

Laboratory must be taken with DEH 113.

120 Introduction to Dental Terminology 1 Cr. Hr.

Orientation to terms related specifically to the science of dentistry to prepare students for the dental hygiene program. The method of presentation includes a "sounds like" pronunciation system along with definitions and relationships of words to other similar dental terms.

Prerequisite(s): Completion of any required DEV courses (if applicable)

125 Dental Materials 3 Cr. Hrs.

General knowledge, proper manipulation and use of various dental materials used in the dental practice setting and how to educate and inform patients about materials used for their dental care. Two lecture, two lab hours per week.

Prerequisite(s): DEH 113

126 Lab for DEH 125

Laboratory must be taken with DEH 125.

135 Dental Radiology 4 Cr. Hrs.

Scientific principles of radiation and radiographic production in dental practice. Three lecture, three lab hours per week.

Prerequisite(s): DEH 103

136 Lab for DEH 135

Laboratory must be taken with DEH 135.

155 Oral Histology, Embryology & Pathology 4 Cr. Hrs.

Development, microscopic anatomy and congenital/acquired abnormalities of oral and para-oral tissues. Selected principles of general histology and embryology are offered for comparison. Three lecture, two lab hours per week.

Prerequisite(s): DEH 103

156 Dental Hygiene Research Project 1 Cr. Hr.

Preparation of a scientific literature review of a health care related topic with relevance to the clinical practice of dental hygiene. Two lab hours per week.

Prerequisite(s): ALH 104 and DEH 157

157 Research Methodology 2 Cr. Hrs.

Overview of statistical terminology and notations needed for dental hygiene research and literature review.

Prerequisite(s): DEH 105

165 Computer Applications in Dentistry 1 Cr. Hr.

Eaglesoft Dental Software acquaints students to dental office applications. Orientation to the use of technology in the dental office delivery system including developing and editing patient information systems, recare management, scheduling procedures, insurance claims, custom route slips, productivity and financial analysis. Also includes restorative chart-

ing, perio charting, clinical exam, medical history, treatment planning and managing progress notes. Understanding and applying HIPPA regulations as they pertain to the dental field are presented.

Prerequisite(s): ALH 104 and restricted to DEH majors

170 Radiology for Dental Auxiliaries 3 Cr. Hrs.

Standard diagnostic radiologic procedures that contribute to high quality dental care. Topics include radiation physics, radiation biology, radiation hygiene, safety measures for the operator and the patient. Also includes imaging receptors such as conventional film, phosphor plates, and charged coupled devices. Student practice of intra-oral and extra-oral techniques, basic interpretation skills, including proper film mounting and discriminating between restorative materials and identifying basic dental anatomy. Overall quality assurance, including darkroom operations and maintenance, proper documentation, duplication and confidentiality of dental records are also covered. Two lecture, two lab hours per week.

210 Drug Therapy in Dentistry 2 Cr. Hrs.

Overview of conventional drug classes with emphasis on actions, effects and indications for dental practice.

Prerequisite(s): BIO 141, BIO 142

211 Clinical Dental Hygiene II 6 Cr. Hrs.

Skill developments focusing on the practitioner's ability to assess, diagnose, plan, implement, and evaluate dental hygiene care. Emphasis is placed on caring for children and with disabilities, nutritional counseling, adjunctive therapies, and case presentation. Two lecture, four clinical hours per week.

Prerequisite(s): DEH 113

212 Clinical Dental Hygiene III 6 Cr. Hrs.

Skill developments focusing on the practitioner's ability to assess, diagnose, plan, implement, and evaluate dental hygiene care in various settings. Emphasis is placed on oral health care throughout the life cycle, special needs patient care, and case presentation. Two lecture, four clinical hours per week.

Prerequisite(s): DEH 211

213 Clinical Dental Hygiene IV 6 Cr. Hrs.

Skill developments focusing on the practitioner's ability to assess, diagnose, plan, implement, and evaluate dental hygiene care in various settings. Emphasis is placed on advanced dental hygiene procedures and smoking cessation program development. Two lecture, four clinical hours per week.

Prerequisite(s): DEH 212

215 Periodontics I 2 Cr. Hrs.

A study of periodontal disease including its etiology, pathogenesis, diagnosis and treatment. The content is designed to supplement pre-clinical and clinical course work from DEH 111, DEH 112, and DEH 113.

Prerequisite(s): DEH 112

217 Clinical for DEH 211

Clinical must be taken with DEH 211.

218 Clinical for DEH 212

Clinical must be taken with DEH 212.

219 Clinical for DEH 213

Clinical must be taken with DEH 213.

220 Medical Emergencies in the Dental Office 2 Cr. Hrs.

Principles of first aid and the management of medical emergencies in dental practice settings. One lecture, two lab hours per week.

Prerequisite(s): ALH 140 or current BLS certification, ALH 220, DEH 103

235 Community Dental Health I 3 Cr. Hrs.

Introduction to public health concepts, principles and practices in oral health promotions and disease prevention: This course will provide the student with a broad understanding of the health care system and the social, political, cultural, behavioral and economic forces directing the system. Students will be introduced to their roles as community health educators through didactic and experiential learning opportunities.

Prerequisite(s): DEH 113

236 Community Dental Health II 2 Cr. Hrs.

Application of dental health education within the community. This course will provide the dental hygiene student with specific knowledge and skills required to plan and evaluate dental health promotion/disease prevention programs in school and community settings. Principles of public health practice will be emphasized using community outreach processes for community health promotion and disease prevention activities and the application of research methodology.

Prerequisite(s): DEH 235

247 Expanded Functions for Dental Auxiliary I 6 Cr. Hrs.

Typodont experience of placing cavity bases and liners, matrices, rubber dams, placing and contouring amalgam and tooth-colored restorations, and the technique of instrument transfer.

248 Expanded Functions for Dental Auxiliary II 6 Cr. Hrs.

Laboratory and clinical application of placement of CI, II, III, IV, V restorations.

Prerequisite(s): DEH 247

249 Expanded Functions for Dental Auxiliary III 6 Cr. Hrs.

Mastery of clinical application of placing amalgam and composite restorations.

Prerequisite(s): DEH 248

250 Periodontics II 2 Cr. Hrs.

A continuation of the study of periodontology; emphasis on non-surgical periodontal therapy and supportive periodontal therapy. Parameters and guidelines for patient care; analysis of current literature; and overview of surgical periodontal therapy, including dental implants.

Prerequisite(s): DEH 215 or licensed dental hygienist

253 Pain Control in Dentistry 1 Cr. Hr.

Anatomy, physiology and pharmacology of local anesthesia and nitrous oxide sedation and the indications, limitations and precautions associated with their use.

Prerequisite(s): DEH 210 or ALH 219

255 Dental Hygiene Practice 2 Cr. Hrs.

This course is designed to prepare student dental hygienists for transition to dental hygiene practice. Emphasis will be placed on current issues in dental hygiene including resume and/or portfolio development; interviewing strategies and practice setting selection; legal and ethical issues; professional development for lifelong learning; and organized dental hygiene.

Prerequisite(s): DEH 212

Developmental Studies (DEV)

045 ESL Basic I R 4 Cr. Hrs.

For non-native speakers of English: basic grammar patterns in speaking and writing, including simple present, present progressive and simple present, talking about the future, asking questions, modals of probability and possibility, past progress and simple past with time clauses, similarities and differences, and measure word quantifiers. Moderate beginner reading test to be used for the purpose of reading comprehension, discussion, writing, vocabulary, and pronunciation. Requires a basic understanding of spoken and written English.

046 ESL Basic II R 4 Cr. Hrs.

For non-native speakers of English grammatical patterns including perfect tenses and complex sentences in reading and writing expository paragraphs; strategies for increasing accuracy and comprehension in listening and speaking (not an intensive course).

Prerequisite(s): DEV 045

047 ESL Basic III R 4 Cr. Hrs.

For non-native speakers of English: reading and writing paragraphs using topic sentences and supporting sentences; grammatical patterns including comparison, condition, direct and indirect speech, and listening and speaking in structured discussion (not an intensive course).

Prerequisite(s): DEV 046

048 ESL Intermediate I R 4 Cr. Hrs.

For non-native speakers of English: grammar and writing skills using all verb forms, modifiers, and selected sentences patterns; reading, discussing and summarizing short essays (not at intensive course).

Prerequisite(s): DEV 046, DEV 047

049 ESL Intermediate II R 4 Cr. Hrs.

For non-native speakers of English: subordination, coordination, complex sentences, transitions and organizational patterns in expository prose for writing, speaking, reading, and listening (not an intensive course).

Prerequisite(s): DEV 048

050 ESL Advanced R 4 Cr. Hrs.

For non-native speakers of English: review of grammar, short essay composition, reading and listening comprehension as preparation for successful handling and completion of degree level classes.

Prerequisite(s): DEV 049

063 Basic Reading Skills 4 Cr. Hrs.

Course is designed to allow students to develop basic reading skills with an emphasis on strategies to learn new vocabulary, find main ideas, analyze paragraph structures, and write summaries. Course will prepare students to move into DEV 064, Fundamentals of Reading.

Prerequisite(s): Approval of division counselor or placement scores

064 Fundamentals of Reading 4 Cr. Hrs.

Develop reading skills with an emphasis on strategies to acquire vocabulary, recognition of main ideas and supporting details, general comprehension of paragraphs and articles, and oral and written summaries.

Prerequisite(s): DEV 063 or placement score

065 Developmental Reading 4 Cr. Hrs.

Through individual and collaborative activities, course will prepare students for college level reading and will introduce basic critical reading and thinking strategies and a variety of study skills that promote student development and achievement.

Prerequisite(s): DEV 064 or placement scores

074 Fundamentals of Sentence Structure 4 Cr. Hrs.

Review of basic grammar and writing skills with emphasis on creating proper sentence structure through combining, coordinating, and subordinating ideas in correct sentence form including application of the basic principles of grammar.

Prerequisite(s): Placement test score or approval of division counselor

075 Fundamentals of English 4 Cr. Hrs.

Introduction to basic paragraph writing (topic sentence, body sentences, concluding sentence) and the principles of correct grammar, usage, punctuation, and mechanics.

Prerequisite(s): DEV 074 placement

084 Basic Mathematics I 4 Cr. Hrs.

Provides instruction in basic arithmetic for whole numbers, fractions and decimals with the goal of developing computational skills, number-sense, and problem solving skills. Prepares students for further study in mathematics by employing effective study strategies and a variety of teaching/learning experiences.

Prerequisite(s): Placement test score

085 Basic Mathematics II 4 Cr. Hrs.

Review of basic arithmetic skills in whole numbers, decimals, and fractions with emphasis on problem solving situations. Instruction into the meaning and use of percentages, ratios, proportions, and measurements. Brief introduction into signed numbers.

Prerequisite(s): DEV 084 or satisfactory score on placement test

101 Foundations of Science 4 Cr. Hrs.

Basic principles of general science focusing on the nature of the ecosystem with an introduction to the cell, human anatomy, properties of matter, concepts of motion, force, and work; applications of mathematical operations, techniques for problem solving and for reading technical materials.

Prerequisite(s): DEV 064 and DEV 085

108 Introduction to Algebra 4 Cr. Hrs.

Introduction to beginning algebra concepts including operations with rational numbers, identifying and combining like terms, solving one-variable linear equations/inequalities, and laws of exponents. Additional topics include the recognition of simple algebraic patterns and the study and use of some basic geometric formulas.

Prerequisite(s): DEV 085 or equivalent or placement test score

110 Introduction to Composition 4 Cr. Hrs.

Introduction to the fundamentals of essay writing, including the stages of the composing process: pre-writing, drafting, and revising; introduction to planning, outlining, editing, and proofreading of the essay. Review of the grammatical principles governing correctness and effectiveness of expression in the use of the parts of speech, phrases and clauses, sentence structure, and paragraph organization.

Prerequisite(s): DEV 064 and DEV 075 or placement

130 Critical Reading & Writing 4 Cr. Hrs.

Development of basic reading, writing, and research skills. Introduction to summarizing, paraphrasing, and quoting in order to develop the reading and writing connection in the literary analysis, argument, and research papers. Review of grammar, basic essay writing, revising, and editing techniques. Emphasis is placed on reflective and analytical thinking.

Prerequisite(s): DEV 075 and DEV 064. placement and/or instructor recommendation

297 Special Topics in Developmental Studies R 0.5 - 6 Cr. Hrs.

Provides opportunities to receive credit for additional learning opportunities in basic skills through special topics and alternative learning modes.

Disability Intervention Services (DIS)

105 Introduction to Developmental Disabilities 4 Cr. Hrs.

Orientation to causes and characteristics of developmental disabilities, as well as historical, philosophical and legal foundations. Service delivery models, legislation, issues and skills related to disabilities careers and the role of the para-educator. Field observation required.

106 Assessment/Curriculum/Instruction: Learners with Special Needs 5 Cr. Hrs.

Program planning for learners with special needs including assessment, legal and ethical issues, age and developmentally appropriate curriculum and instructional techniques, structuring learning environments, selection of appropriate materials, technology and equipment to enhance learning. Field observation required.

Prerequisite(s): DIS 105

108 Principles/Techniques Behavior Management & Learning Environments 4 Cr. Hrs.

Orientation to behavior prevention and intervention techniques used with learners with special needs. Application of these techniques based on procedural safeguards, policies, legal responsibilities and ethics. Factors in environment and impact of disabilities upon behavior.

Prerequisite(s): DIS 105 or concurrent

115 Human Service Delivery Systems & Resources 3 Cr. Hrs.

Orientation to social services and community resources available to persons with developmental disabilities; historical, philosophical and legal foundations for services, referral procedures, current trends and issues; confidentiality, legal and ethical responsibilities of human service employees.

Prerequisite(s): DIS 105

120 Developmental Disabilities & Sexuality Issues 3 Cr. Hrs.

Basic guidelines for designing and implementing sexuality education programs for persons with developmental disabilities with attention to legal issues, agency policies, personal attitudes and values.

Prerequisite(s): DIS 105

124 Residential Services & Developmental Disabilities 3 Cr. Hrs.

Historical, philosophical and legal foundations of residential services, current options for learners with developmental disabilities, development of goals, active treatment plans, use of appropriate instructional strategies in residential settings, maintaining safe and healthy environments, collaboration with team and families.

Prerequisite(s): DIS 106 or permission of instructor

126 Collaboration with Families 3 Cr. Hrs.

Effects of culture, disability, socioeconomic status on collaboration and interaction with families; effect of family environment on learner; strategies to promote effective collaboration with families with emphasis on communication, confidentiality and ethics and role as a team member. Field observation/participation required.

130 Principles of Production in Adult Services 3 Cr. Hrs.

Theoretical and legal foundations of basic management and production procedures in employment settings with adults with developmental disabilities including management and production, bidding, contract procurement, job analysis, layout, quality control; application of appropriate instructional strategies with appropriate materials and technology in safe and health work environments. Ethical and professional standards as team member.

Prerequisite(s): DIS 105 or permission of instructor

131 Counseling Principles & Developmental Disabilities 3 Cr. Hrs.

Introduction to principles of counseling with individuals with developmental disabilities. Counseling techniques appropriate for groups and individuals with developmental disabilities and the impact of a developmental disability upon techniques; ethical, cultural and professional issues in using counseling techniques and the role of the para-educator as a collaborative team member.

Prerequisite(s): DIS 105

140 Fundamentals of Supervision in Human Services 3 Cr. Hrs.

Orientation to the principles and practices of supervision in a human services work environment. Areas include adjusting to supervision, supervisory functions, leadership, employee relations, and individual development planning.

Prerequisite(s): DIS 105 or permission of instructor

190 Disabilities Intervention Services Workshops R 0.5 - 6 Cr. Hrs.

Overview of current topics in developmental disabilities, learning, curriculum or instruction.

201 Field Practicum I 5 Cr. Hrs.

Supervised practical experience in a setting with learners with special needs. Weekly seminar addresses topical issues and professional development. Written application required one quarter in advance. Three lecture, ten directed practice hours per week.

Prerequisite(s): DIS 108 and DIS 206 or concurrent

202 Field Practicum II 7 Cr. Hrs.

Supervised practical experience in a setting with learners with special needs. Weekly seminar addresses topical issues and professional development. Written application required one quarter in advance. Three lecture, 20 directed practice hours per week.

Prerequisite(s): DIS 108 or concurrent

205 Inclusion: Principles & Practices 4 Cr. Hrs.

Orientation to philosophical, historical and legal foundations of inclusion of learners with special needs including learning characteristics, use of appropriate instructional and behavioral strategies in safe and healthy settings. Role as team member in effective collaboration.

206 Computer Literacy & Assistive Technology 1 Cr. Hr.

Introduction to the use of personal computers and software programs with overview of assistive technology used by persons with sensory impairments. Field participation required.

Prerequisite(s): DIS 105 or MAC 101

207 Health & Safety Aspects of Learners with Special Needs 3 Cr. Hrs.

Overview of typical physical development of learner. Impact of disabilities and health impairments upon physical development, health and safety issues. Specific techniques related to lifting, transferring and positioning; independent living skills and mobility; use of adaptive equipment and technology; universal precautions, role as team member in adhering to policies and procedures, ethics and professionalism.

Prerequisite(s): DIS 201 or permission of instructor

208 Language Development & Communication Techniques 4 Cr. Hrs.

Overview of typical language development and role of language and communication in learning. Effects of developmental disabilities upon language and communication; techniques for assessment and facilitating communication including verbal and non-verbal strategies, augmentative and alternative communication; role of collaborative team.

Prerequisite(s): DIS 201 or DIS 270

209 Team Processes 3 Cr. Hrs.

Orientation to organizational characteristics of various service delivery models; team approach including collaboration, transdisciplinary strategies, conflict resolution, effective listening and communication, problem solving and stress management. Role of confidentiality and ethics; importance of culture related to team processes.

Prerequisite(s): DIS 201 or DIS 270

210 Assistive Technology 1 Cr. Hr.

Overview of assistive technology used by individuals with special needs; community resources and related procedures; criteria for selection of software and switches. Field participation required.

Prerequisite(s): DIS 206

220 Foundations in Reading Instruction 4 Cr. Hrs.

Theories and approaches to foundations of reading instruction including decoding, skill, whole language, phonetic, etc. Analysis of reading skills and use of instructional strategies and technology as team member to support reading, role of language development and reading; use of informal assessments to determine areas for instruction.

Prerequisite(s): DIS 105 or permission of instructor

225 Instructional Techniques: Literacy through Literature 3 Cr. Hrs.

Utilization of literature to facilitate development of literacy skills, including reading, print, and writing. Criteria for selection of diverse, quality literature and its use in addressing phonological, visual, syntactic and semantic cues while reading for meaning, techniques for supporting the learner with special needs.

Prerequisite(s): DIS 105 or permission of instructor

226 Instructional Techniques in Math/Science/Social Studies 3 Cr. Hrs.

Foundations of instructional practices in mathematics, science and social studies for students in elementary schools. Emphasis on constructivist approaches and active learning.

Prerequisite(s): DIS 105 or permission of instructor

270 Internship: Disabilities Intervention Services R 2 - 4 Cr. Hrs.

Utilize student's employment responsibilities while employed full time in approved setting; incorporates learning outcomes through activities related to Disabilities Intervention Services program outcomes. Written approval of employer required. Written agreement of employer to supervise internship experience required. Application required one quarter in advance.

Prerequisite(s): 12 credit hours within CFE department which include DIS 105 or DIS 106 or DIS 108

295 Special Topics in Disabilities Intervention Services R 1 - 5 Cr. Hrs.

Overview of current topics in developmental disabilities, learning, curriculum or instruction.

Dietetics Technology (DIT)**108 Introduction to Food & Nutrition 3 Cr. Hrs.**

An overview of basic nutrition principles and meal management with consideration to food choices as they relate to nutrition and health.

109 Introduction to Dietetics 2 Cr. Hrs.

A survey of the dietetics field with emphasis on the role of the dietetic technician in practice; includes an introduction to the field experience, field trips, professional meeting attendance and guest speakers.

111 Nutrition for a Healthy Lifestyle 3 Cr. Hrs.

Overview of basic diet planning principles, with emphasis on healthy food choices and disease prevention. Includes fad diets, herb and supplemental strategies, and issues of supplements as ergogenic aids; effective use of nutrition information from professional organizations and reliable sources; and personal responsibility.

112 Medical Terminology for DIT 2 Cr. Hrs.

The use of prefixes, suffixes, root words and the combining forms, as related to anatomy and physiology, diseases, laboratory operations and drugs.

129 Human Nutrition 5 Cr. Hrs.

Principles of nutrition with emphasis on the functions of the nutrients, their digestion, absorption metabolism and inter-relationships, including food economics.

Prerequisite(s): Permission of department chairperson

135 Nutrition in the Life Cycle 4 Cr. Hrs.

Nutritional needs from conception to maturity, including the physiological, psychological and sociological factors during the life cycle. Three lecture and two hours of weekly directed practice.

Prerequisite(s): DIT 129 and signature of department chairperson

137 Food Sanitation & Safety 3 Cr. Hrs.

In-depth study of food sanitation and safety, including food microbiology, food-borne illnesses and gastroenteric outbreaks. Emphasis on correct sanitary practices including the Hazard Analysis Critical Control Point (HACCP) to ensure quality in food procurement, storage, preparation, service, and disposal.

138 Serve/Safe 2 Cr. Hrs.

Food sanitation and safety including an overview of the microworld and foodborne illnesses with emphasis on correct sanitary practices and techniques to ensure quality in food procurement, storage, preparation, service, and disposal. Designed for food service staff with limited time for regularly scheduled classes.

140 Nutrition & Total Wellness**R 2 Cr. Hrs.**

Provides a balanced wellness program of weight management that incorporates food patterns, market strategies, menus, exercise, and behavior modification techniques, including thoughts and feelings about food, exercise, and dieting.

143 Healthy Cooking 2 Cr. Hrs.

An exploration of the basic principles of nutrition, food selection, meal preparation, recipe modifications/substitutions that promote healthy eating and disease prevention. Menu planning and sanitation principles will be incorporated. Celebrate life by being healthy is the theme of this course.

145 Nutritional Trends 2 Cr. Hrs.

Up-to-date reviews, summaries, and commentaries on the role of food and nutrition in various conditions during the human life cycle. The course is designed to help students critique information for validity and separate nutritional experts from sensational journalists and nutritional frauds.

200 Dining Assistant 1 Cr. Hr.

Practical skill development in feeding techniques and working with the elderly. The program is designed to ensure that dining Assistants have a basic understanding of the nutritional needs of the residents, communications and interactions involving the residents and staff, and behavior challenges and safety procedures.

203 Medical Nutrition Therapy for Dietary Managers 4 Cr. Hrs.

Introductory course for nutrition care personnel in health care institutions. Overview of nutrition, diet therapy and menu planning. Exploration of diseases that require medical nutrition therapy, concepts of therapeutic diets, and how these relate to body systems.

Prerequisite(s): DEV 065 and DEV 084

204 Practicum for DIT 203 3 Cr. Hrs.

A hands-on course related to food preferences, basic nutrition principles, medical nutrition therapy, nutrition screening, documentation, care plans, and continuous quality improvement programs. Six hours lab per week; lab is conducted at an approved site.

Prerequisite(s): DEV 065 and DEV 084

208 Advanced Food Preparation & International Cuisine 2 Cr. Hrs.

Identification of basic baking and production principles of classical soups, secondary sauces, meats, poultry, and fish. Exploration of ingredients, flavor profiles, and preparation techniques of international cuisines.

Prerequisite(s): HMT 112 and HMT 113 or approval of chairperson

209 Laboratory for DIT 208 2 Cr. Hrs.

Laboratory component of DIT 208; addresses production of classical soups, secondary sauces, meat, fish and poultry, as well as basic baking principles. Ingredients and flavor profiles of international cuisine and preparation techniques.

Prerequisite(s): HMT 112 and HMT 113 or approval of chairperson

216 Food Preparation & Dietary Service 4 Cr. Hrs.

Food preparation in institutions including quantity cooking principles, recipe standardization, equipment layout/design and menu planning. Four lecture hours.

Prerequisite(s): HMT 112 and HMT 113 or approval of chairperson

218 Directed Practice for DIT 216 3 Cr. Hrs.

A hands-on course related to food preparation in institutions including quantity cooking principles, recipe standardization, equipment layout/design, modified texture and therapeutic menu planning, and food safety and sanitation. Six hours at directed practice site per week.

Prerequisite(s): HMT 112 and HMT 113 or approval of chairperson

219 Laboratory for DIT 216 1 Cr. Hr.

Laboratory component of DIT 216. Menu planning, quantity cooking principles, modified and therapeutic diets, recipe standardization, kitchen equipment, food cost control and cost relationships.

Prerequisite(s): HMT 112 and HMT 113 or approval of chairperson

221 Medical Nutrition Therapy I 3 Cr. Hrs.

Medical nutrition therapy for diabetes mellitus and physiologic stress including texture alteration and feeding routes with emphasis on nutritional assessments, minimum data sets, resident assessment protocols, and care plans. Must be taken with the Dietetics Directed Practice I (DIT 226).

Prerequisite(s): DIT 135 or permission of department chairperson

222 Medical Nutrition Therapy II 3 Cr. Hrs.

Medical nutrition therapy including diet writing for the diseases of the heart and blood vessels; gastrointestinal tract; gall bladder; pancreas; kidney and liver.

Prerequisite(s): DIT 221 or permission of department chairperson

223 Medical Nutrition Therapy III 3 Cr. Hrs.

This is a capstone course for the medical nutrition therapy series. This course includes medical nutrition therapy for cancer and AIDS, and review modules for tube feeding, diabetes, severe stress, cardiovascular disease, upper and lower gastrointestinal disorders, gall bladder and pancreatic disorders, liver and renal disease. Case studies and critical thinking exercises have been incorporated addressing the diseases covered in the medical nutrition therapy series.

Prerequisite(s): DIT 222 or permission of department chairperson

224 Community Nutrition 3 Cr. Hrs.

Food and nutrition issues related to families and special needs groups living in defined geographic areas. Directed practice includes participation in and evaluation of community nutrition programs that provide access to food sources; food and nutrition education; and health related care. One lecture and four hours directed practice.

Prerequisite(s): Signature of department chairperson

225 Educational Methods & Materials 3 Cr. Hrs.

Teaching/learning methods and materials that maximize the role of the educators including technology, the use and care of media resources, equipment, print and non-print materials.

226 Dietetics Directed Practice I 4 Cr. Hrs.

Clinical experience related to topics in DIT 221 including diet writing, patient interviews, nutritional assessments, and care plans. Eight practicum hours per week.

Prerequisite(s): To be taken concurrently with DIT 221; signature of department chairperson

227 Dietetics Directed Practice II**4 Cr. Hrs.**

Clinical experience related to topics in DIT 222 including diet writing, patient interviews, nutritional assessments, and care plans. Eight practicum hours per week.

Prerequisite(s): DIT 221, DIT 226 or approval of department chairperson

228 Dietetics Directed Practice III**3 Cr. Hrs.**

Clinical experience related to topics in DIT 223 including diet writing, patient interviews, nutritional assessments/protocols, care plans, minimum data sets and counseling. Six hours per week.

Prerequisite(s): DIT 222 and DIT 227 or approval of chairperson

236 Dietary Organization & Management**4 Cr. Hrs.**

Management principles and practice for the dietary/foodservice supervisors; planning, staffing, directing, controlling, and budgeting functions as well as labor relations.

Prerequisite(s): DIT 216 and DIT 219 and DIT 218 or approval of chairperson

237 Directed Practice for DIT 236**3 Cr. Hrs.**

Management principles and practice for the dietary/food service supervisors; planning, staffing, directing, controlling and budgeting functions as well as labor relations. Six hours of clinical laboratory experience per week.

Prerequisite(s): DIT 216 and DIT 218 and DIT 219 or approval of chairperson

240 Food & Culture**2 Cr. Hrs.**

Explore the relationship between food and culture, including geography, religion, mores, and life cycle rituals. Discuss the world cuisines and development of Asia, Middle East, Africa, Europe, Mediterranean, and the Americas.

255 Dietetics Seminar**2 Cr. Hrs.**

Capstone review to prepare students for national comprehensive dietetic technology examination and employment. Review of the following domains; Food and Nutrition, Food Service System & Sanitation, and Management. Also includes the job market, resume writing, interviewing skills, recent developments in nutritional care, nutrition research, legislation and challenges related to dietetics.

Prerequisite(s): Permission of department chairperson

297 Special Topics In Nutrition**R 0.5 - 6 Cr. Hrs.**

Topics and trends in nutrition and dietetics for personal enrichment and continuing education.

Experience Based Education (EBE)**100 Prior Learning Portfolio Development****3 Cr. Hrs.**

A course to help students prepare a portfolio describing and documenting their learning from experience. Upon completion, the portfolio is evaluated and college credit is awarded to the extent the learning is college equivalent.

130 A.T.S./A.I.S. Degree Planning Seminar**1 Cr. Hr.**

Development of the individual plan of study to be followed for successful completion of the A.T.S./A.I.S. degrees, involving curriculum design and career and life/work planning. Open only to A.T.S./A.I.S. students.

Prerequisite(s): DEV 065 and DEV 110 or equivalent

200 Portfolio Update**R 1 Cr. Hr.**

A continuation of Prior Learning Portfolio Development, facilitated through individual sessions with a portfolio faculty person.

Prerequisite(s): EBE 100 or CWE 100

275 Student Leadership Field Experience**R 1 - 12 Cr. Hrs.**

Student leadership field experience credit offered for preparation to participate and/or lead organizations.

Prerequisite(s): Departmental approval

278 A.T.S./A.I.S. Capstone**3 Cr. Hrs.**

Pre-graduation seminar which will focus on reflective learning, assessment of degree program goals, and documentation of mastery in subject areas used in A.T.S./A.I.S. degree.

Prerequisite(s): EBE 130

297 Special Topics in Experience Based Education**R 0.5 - 10 Cr. Hrs.**

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

Early Childhood Education (ECE)**101 Introduction to Early Childhood Education****3 Cr. Hrs.**

Professional issues in the field of Early Childhood Education. Review of related historical and current trends. Types of early childhood programs and career options. Center participation required.

Prerequisite(s): DEV 065 and DEV 075 or equivalent

104 Prenatal Life & Birth**3 Cr. Hrs.**

Prenatal development progressing from conception through birth.

106 Childhood Nutrition, Health, & Safety**3 Cr. Hrs.**

Nutritional, health and safety needs of the young child. Developing and implementing routines and activities in early education and care settings. Ohio Child Day Care Laws and Rules. Center observation required.

Prerequisite(s): DEV 065 and DEV 075 and DEV 085 or equivalent

111 Child Abuse Recognition & Prevention**1 Cr. Hr.**

Fulfills criteria for child abuse recognition and prevention training requirements established by the Ohio Administrative Code (Chapter 5101), including indicators, reporting, interagency information sharing, familiar support, day care issues. Center participation required.

112 E.C.E. First Aid**1 Cr. Hr.**

Recognition and emergency management of first aid situations in a day care center setting; fulfills criteria established by the Ohio Administrative Code (Chapter 5101). Center participation required.

113 Communicable Diseases: Prevention & Recognition**1 Cr. Hr.**

Fulfills criteria for prevention, recognition, and management of communicable diseases training established by the Ohio Administrative Code (Chapter 5101), including prevention and transmission, hygiene, signs/symptoms, protection of day care center staff.

117 Language Experiences in Early Childhood**4 Cr. Hrs.**

Language and literacy development in young children. Supporting family literacy, assessing the young child's language and literacy development, locating professional resources, and planning curriculum to facilitate the individual development of language and literacy in young children.

Prerequisite(s): DEV 065, DEV 075 or equivalent score on placement test

118 Math & Science Experiences in Early Childhood 4 Cr. Hrs.

Creating a developmentally appropriate math and science curriculum for pre-school children following guidelines and standards established by the major professional organizations and the Ohio Department of Education Early Learning Content Standards for Mathematics and Science.

Prerequisite(s): ECE 120 and SOC 215 and ENG 112

119 Art & Music Experiences in Early Childhood 4 Cr. Hrs.

Developmental characteristics of young children in art and music experiences with a variety of developmentally appropriate activities. Center participation required.

Prerequisite(s): ECE 129 and MUS 121 and ECE 150

120 Observing Young Children 3 Cr. Hrs.

Observing and recording the behaviors of young children in early childhood settings utilizing authentic assessment techniques. Center observations required.

Prerequisite(s): ECE 101, ECE 106, ECE 150 and ENG 111

129 Interaction With Young Children 5 Cr. Hrs.

Supervised interaction experience with an emphasis on identification of developmentally appropriate activities in the Sinclair Community College Early Childhood Education Center. Advance written application required. Two lecture, six lab hours per week.

Prerequisite(s): ECE 101 and ECE 106 and ECE 120

135 Group Care for Infant & Toddler 3 Cr. Hrs.

Programming for the professional infant/toddler care worker in a group care setting. Criteria for establishing and maintaining a safe and healthy learning environment, developmentally appropriate infant/toddler activities, and improving basic skills of infant/toddler care. Field participation required.

145 Guidance & Discipline 3 Cr. Hrs.

Guidance and problem solving strategies used by early childhood professionals to help young children develop positive social and emotional skills. Practical application of guidance and problem solving techniques. Center observation required.

Prerequisite(s): DEV 075 or equivalent

146 The Challenging Child 3 Cr. Hrs.

An overview of children's behavior identified by practitioners as challenging; development of an operational definition of challenging behaviors; causes, techniques and interventions to address challenging behaviors.

Prerequisite(s): ECE 145, ECE 120

150 The Young Child 4 Cr. Hrs.

Promoting positive growth of infants, toddlers, and pre-schoolers. Impact of the learning environment including family, community and culture on the child's development

Prerequisite(s): DEV 065, DEV 075 or equivalent

160 Teaching Techniques in ECE 3 Cr. Hrs.

Planning quality learning experiences and environments for young children. National and state curriculum standards. Factors influencing curriculum development in early childhood education

Prerequisite(s): ECE 117, ECE 118, ECE 119, ECE 229

190 Early Childhood Education Workshop R 0.5 - 6 Cr. Hrs.

Workshops offered on and off campus for persons in, and interested in the field of Early Childhood. Workshops with be planned, scheduled, and offered throughout the academic year in a variety of subject areas and for varying lengths of time.

191 Early Childhood Education Workshop R 0.5 - 6 Cr. Hrs.

Workshops offered on and off campus for persons in, and interested in the field of Early Childhood. Workshops with be planned, scheduled, and offered throughout the academic year in a variety of subject areas and for varying lengths of time.

192 Early Childhood Education Workshop R 0.5 - 6 Cr. Hrs.

Workshops offered on and off campus for persons in, and interested in the field of Early Childhood. Workshops with be planned, scheduled, and offered throughout the academic year in a variety of subject areas and for varying lengths of time.

215 Building Family & Community Relationships 3 Cr. Hrs.

Family dynamics, family development and culturally responsive practices in early childhood education. Creating respectful reciprocal relationships with family and community resources. Supporting and communicating with families.

Prerequisite(s): SOC 115, ECE 229, DIS 205

216 Integrating Social Studies into the Early Childhood Curriculum 3 Cr. Hrs.

Integrating social studies into the early childhood curriculum using a variety of domains, projects, materials and activities. Key knowledge and social studies concepts developmentally appropriate for young children. State of Ohio Department of Education Early Learning Content Standards for Social Studies.

Prerequisite(s): ECE 120, SOC 215, ENG 112

220 Assessment in Early Childhood Education 3 Cr. Hrs.

Use of standardized tests and other evaluation and measurement tools that are developmentally appropriate for young children in ECE settings. Center participation required.

Prerequisite(s): ECE 129

225 Administration of Child Care Centers 4 Cr. Hrs.

Major aspects of developing a program of early education and care including licensing laws, program development, personnel management, staff and program assessment, marketing and advocacy.

226 Activities for Young Children 2 Cr. Hrs.

Characteristics of age-appropriate activities for pre-school children; teaching skills for implementing activities. Practical ideas for activities including seasonal holiday, etc. Development and utilization of materials for activities. Center participation required.

228 School Age Child Care 3 Cr. Hrs.

Child care for school age children including the four areas of development of the school age child; special needs of school age children; curriculum for a school age program; and how to operate a school age child care program; unique characteristics of day care for school age children. Center participation required.

229 Principles & Practices of Interaction 3 Cr. Hrs.

Selected interaction techniques used by early childhood professionals to support children's physical, social, emotional, aesthetic, language, and cognitive development. Observation of teacher-child interactions within a play setting.

Prerequisite(s): SOC 215, ECE 120, COM 206 or COM 211, ENG 112 and approval of chairperson

275 Internship R 1 - 4 Cr. Hrs.

Utilizes students' experience while working with young children. Learning outcomes related to principles and theories of early childhood education. An advisor is assigned to work with the student and monitor the internship experience.

280 Student Teaching I 6 Cr. Hrs.

Supervised student teaching experience in the Sinclair Community College Early Childhood Education Center. Written application required one quarter in advance.

Prerequisite(s): ECE 160, SOC 115, ENG 113

281 ECE Student Teaching II 7 Cr. Hrs.

Supervised student teaching experience in an assigned early childhood program. Development of teaching portfolio. Written application required one quarter in advance.

Prerequisite(s): ECE 182 or ECE 280

295 Special Topics in Early Childhood Education R 1 - 5 Cr. Hrs.

Provides opportunities to offer special interest content within the discipline as well as receive credit for instruction delivered in a non-traditional format such as TV.

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297 Special Topics in Early Childhood Education R 1 - 5 Cr. Hrs.

Provides opportunities to offer special interest content within the discipline as well as receive credit for instruction delivered in a non-traditional format such as TV.

Economics (ECO)**105 General Economics** 3 Cr. Hrs.

The basic concepts, principles, terminology, and philosophy of economics from both the social and political viewpoint for the non-business student.

216 Principles of Macroeconomics 4 Cr. Hrs.

Basic economic principles with macro sequence. Interrelationship of households, business, and government with an examination of Keynesian theory, fiscal policy and monetary policy.

Prerequisite(s): DEV 108 and successful completion of 30 credit hours of non-DEV college course work.

218 Principles of Microeconomics 4 Cr. Hrs.

Microeconomic theory including price theory, the theory of the firm, resource demand and wage determination. Also includes public policy toward business, economic inequality, labor, trade, balance of payments, and the economics of third world nations.

Prerequisite(s): DEV 108 and successful completion of 30 credit hours of non-DEV college course work.

297 Special Topics in Economics R 0.5 - 6 Cr. Hrs.

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

Education (EDU)**100 Foundations of Education** 4 Cr. Hrs.

Introduction to education as a profession and a potential career. Candidates will explore themes, utilize readings, investigate current issues, interview and observe professionals in the field of teacher education to explore the purposes of schools in society. Candidates will produce carefully considered reflections in order to review the knowledge, skills, dispositions and performances necessary for an individual to become an effective teacher.

Prerequisite(s): DEV 065 and DEV 075 or equivalent skill evidenced by skills assessment

103 Educational Technology 4 Cr. Hrs.

Required course for students transferring to four-year institutions within the field of education. Effective identification, location, evaluation, design, preparation and efficient use of educational technology as instructional resources in the classroom related to principles of learning and teaching, including legal and ethical use. Students develop increased classroom communication abilities through lectures, discussions, modeling, laboratory experiences and completion of a comprehensive project. It is recommended that this course be taken early in the student's program of specialized study.

105 Introduction to Exceptionalities 4 Cr. Hrs.

Survey of developmental characteristics of persons with and without exceptionalities. Introduction to foundations, theory, legal issues, intervention strategies and service delivery models for working with exceptional individuals in educational, community, residential and work settings.

Electrical & Electronics Repair (EER)**121 Electronic Problem Solving** 4 Cr. Hrs.

Essentials of basic algebraic operation with emphasis on applications to problems in electrical and electronic engineering used in electronic industries.

Prerequisite(s): DEV 108

123 High Reliability Soldering 3 Cr. Hrs.

High Reliability Soldering concepts and soldering standards as applied to Through Hole Technology installation and rework on single-sided, double-sided, and multi-layer printed circuit boards, trace and pad repair, safety and ESD concerns, component identification, value codes and schematic symbols. Two lecture, two lab hours per week.

124 Surface Mount Soldering Techniques 4 Cr. Hrs.

High Reliability Soldering concepts and soldering standards as applied to Surface Mount Technology soldering and rework, covering installation and removal of chip components, SOTs, SOICs, PLCCs, QFPs, using soldering iron, extractor, ThermoTweez, ResisTweez, & ConducTweez hand pieces. Additional components, hand pieces, and trace repair. Three lecture, two lab hours per week.

Prerequisite(s): EER 123

125 Printed Circuit Board Design 3 Cr. Hrs.

Various materials, design, processing and soldering of printed circuit boards. Art work and the processing of printed circuit boards. Two lecture, two lab hours per week.

Prerequisite(s): EER 123

138 Microprocessor Programming & Applications 3 Cr. Hrs.

Basic ideas of hardware, software, interfacing and application of microprocessors. Two lecture, two lab hours per week.

Prerequisite(s): EER 136

139 Electrical Machinery 4 Cr. Hrs.

Basic principle, theory, operation and characteristics of common D.C. and A.C. machinery. Three lecture, two lab hours per week.

Prerequisite(s): EER 127 or EER 133 or EET 119

142 Safety in Electric Distribution 3 Cr. Hrs.

Basic principles of working safely with electricity; use of proper tools, equipment and personal protective equipment; general work rules from the National Electric Safety Code, OSHA and Department of Transportation. Two lecture, two lab hours per week.

147 Industrial Wiring & NEC 4 Cr. Hrs.

National Electric Code standards for light and heavy electrical construction installation; safety and service requirements including over current protection, bonding, grounding, switching and conductors. Three lecture, three lab hours per week.

Prerequisite(s): EER 127 or EER 133

166 Industrial Machine Wiring & Standards 3 Cr. Hrs.

Elementary industrial machine wiring principles; schematics, panel layouts, assembly, wiring techniques, and equipment used in automated industry; standards for safe operation of equipment and protection of personnel with emphasis given to hands-on work and actual wiring of panels. One lecture, four lab hours per week.

Prerequisite(s): EER 127 or EET 119

181 Electrical Construction I**R 3 - 8 Cr. Hrs.**

Basic safety procedures, use of hand and power tools; electrical circuit theory; use of test equipment; basics of residential, commercial and industrial wiring observing National Electric Code.

182 Electrical Construction II**R 3 - 8 Cr. Hrs.**

Alternating current theory, motors, grounding, conduit bending, conductor installation, NEC for cables, terminations and splices, electrical single and three phase installation, circuit breakers and fuses, contactors and relays.

Prerequisite(s): EER 181

183 Electrical Construction III**R 3 - 8 Cr. Hrs.**

Load calculations for branch circuits, overcurrent protection, wiring devices, distribution equipment, transformers, calculations for motor circuits; motor maintenance and controls; and basics of HVAC systems.

Prerequisite(s): EER 182

184 Electrical Construction IV**R 3 - 8 Cr. Hrs.**

Calculation procedures for residential, commercial and farming applications, various wiring systems, stand by and emergency systems, basic electronics, fire alarms, special transformers, solid-state controls, welding techniques, heat and freeze protection and high voltage termination.

Prerequisite(s): EER 183

270 Electrical & Electronics Repair**Internship R 1 - 12 Cr. Hrs.**

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

297 Special Topics in Electrical & Electronics Repair 3 - 12 Cr. Hrs.

Basic safety procedures, use of hand and power tools; electrical circuit theory; use of test equipment; basics of residential, commercial and industrial wiring observing National Electric Code.

Prerequisite(s): Permission of chairperson

Electronics Engineering Technology (EET)**104 Introduction to Electronics****3 Cr. Hrs.**

A non-mathematical survey providing a comprehensive coverage of the field of electronics, its history, evolution, theory and application.

114 Basic Electronic Measurements**3 Cr. Hrs.**

Measurement techniques, types of error in measurement, use of measuring instruments: digital multimeter, function generator, D.C. power supplies, timers and counters, analog and digital storage oscilloscopes, function generators and frequency counter. Two lecture, two lab hours per week.

Prerequisite(s): DEV 108

116 Electronics Schematics & Layout**3 Cr. Hrs.**

Basic computer literacy skills with applications for electronic drafting using OrCAD software, electronic symbols, schematic diagrams, printed circuit board layout and design. Two lecture, two lab hours per week.

119 Basic Electrical Circuits & Controls**4 Cr. Hrs.**

Principles of direct and alternating current circuits, diodes and transistors, digital logic, electric motors and control, electrical test equipment. Three lecture, two lab hours per week.

Prerequisite(s): DEV 108 or INT 141

121 Electronics Workshop 3 Cr. Hrs.

Manual skills training covering safety, soldering, wiring, electronic component identification, schematic symbols, wiring diagrams, blueprint reading, resistor color code, and use of tools. Two lecture, two lab hours per week.

150 Electrical Circuits & Instruments I**4 Cr. Hrs.**

Electrical units of measure, electrical laws, power and energy, circuit theorems, resistive networks, R.L. and R.C. circuits and D.C. measuring instruments. Three lecture, two lab hours per week.

Prerequisite(s): EET 114 and MAT 101 or equivalent

155 Electrical Circuits & Instruments II**4 Cr. Hrs.**

Capacitors, inductors, R.C. and R.L. circuits with D.C. excitation; alternating voltage and current phasors, phasor algebra, reactance, impedance, A.C. instruments and the oscilloscope. Three lecture, two lab hours per week.

Prerequisite(s): EET 105 or EET 150

156 Alternate Energy Sources 3 Cr. Hrs.

Overview of past, recent and current research to find viable alternative sources of energy; examples include water, wind, solar, bio-mass, alternative liquid fuels, and intro to fuel cell technology. Study of applied technologies in the context of how to relieve complete dependence on petrochemical based products. A case study approach to learning is used. Two lecture, two lab hours per week.

197 Tech Prep Seminar 1 - 4 Cr. Hrs.

A review course for electronics tech prep freshman students covering D.C. circuits, A.C. circuits, discrete electronics.

198 Digital Technology 3 Cr. Hrs.

Electrical fundamentals, introduction to basics of digital logic and circuits, digital systems, basic digital circuit design. Two lecture, two lab hours per week.

201 Electronics I 4 Cr. Hrs.

Physics of conduction with emphasis on semiconductors, a study of electronic devices and their characteristics, biasing and basic D.C. and A.C. amplifiers. Three lecture, two lab hours per week.

Prerequisite(s): EET 155

202 Electronics II 3 Cr. Hrs.

Field-effect transistors, large signal amplifiers, A.C. equivalent circuits, class A-, B- and C- amplifiers, amplifier frequency response, power amplifiers and troubleshooting techniques. Two lecture, two lab hours per week.

Prerequisite(s): EET 201

205 Electrical Circuits & Instruments III 3 Cr. Hrs.

Series-parallel A.C. circuits, power in A.C. circuits, Wye-Delta transformations, low-pass and high-pass filters, series and parallel resonant circuits, transformers and three-phase circuits. Two lecture, two lab hours per week.

Prerequisite(s): EET 155

207 Linear Integrated Circuits 4 Cr. Hrs.

Introduction to operational amplifiers and their applications as basic amplifiers, comparators, signal generators, active filters and for instrumentation; integrated circuit timers (555), 3-pin integrated circuit regulators, voltage controlled oscillators, phase lock loops and their applications. Three lecture, two lab hours per week.

Prerequisite(s): EET 201

226 Electronic Communication Systems I 3 Cr. Hrs.

Methods of communications, communication circuits, amplitude modulation, angle modulation, radio receivers, transmission lines, radio wave propagation. Two lecture, two lab hours per week.

Prerequisite(s): EET 201 or EER 128

227 Electronic Communication Systems II
3 Cr. Hrs.

Antennas, telephone systems, and pulse modulation techniques; basic principles of microwaves, data, two-way and satellite communications. Two lecture, two lab hours per week.

Prerequisite(s): EET 226

231 Digital Logic & Circuits 4 Cr. Hrs.

Number systems, codes, Boolean algebra, Karnaugh mapping, exclusive circuits or arithmetic circuits. Three lecture, two lab hours per week.

Prerequisite(s): EET 114 and EET 116

251 Digital Systems I 4 Cr. Hrs.

Basic TTL gates, Flip-Flops, clocks, counters, shift-registers, multiplexers and demultiplexers. Three lecture, two lab hours per week.

Prerequisite(s): EET 231

252 Digital Systems II 4 Cr. Hrs.

Arithmetic Logic Units, memory devices, parallel and serial input-output devices. Analog-to-digital converters, digital-to-analog converters, communication protocols, keyboard decoders and CRT displays. Three lecture, two lab hours per week.

Prerequisite(s): EET 251

256 Introduction to Fuel Cells 3 Cr. Hrs.

Review of the historical significance of early development of fuel cells covering the last five decades: proton exchange membrane fuel cell (PEM), solid oxide fuel cell (SOFC), alkaline fuel cell (AFC), phosphoric acid fuel cell (PAFC), molten carbonate fuel cell (MCFC), direct methanol fuel cell (DMFC), current state of the art fuel cell technology; overview of associated technologies necessary for effective fuel cell development; use and applications of methanol, DMFC technology; analysis of various fuel cell technologies. Two lecture, two lab hours per week.

259 Programming for Electronics Technology 3 Cr. Hrs.

Computer solutions of engineering problems, using LabVIEW graphical language, front panel and diagram windows, controls and indicators, wiring steps and Sub Virtual Instruments, loops and conditional statements, data display, arrays and clusters, data acquisition hardware and driver software, instrument control and data analysis for problem solving involving physical principles and engineering applications. Programming assignments require lab time outside of class. Two lecture, two lab hours per week.

Prerequisite(s): EET 116 and EET 105 or EET 150

261 Microprocessor/Microcontroller Systems 4 Cr. Hrs.

Introduction to the fundamentals of microprocessor/microcontroller hardware and software design, starting out with hardware/software analysis and culminating with a design project. Emphasis will be placed on numerical concepts, programming skills and system architecture. Programming assignments will require lab time outside of class. Three lecture, two lab hours per week.

Prerequisite(s): EET 231

262 Microprocessor Applications 4 Cr. Hrs.

Study of 8-bit microprocessor systems, hardware interfacing and serial data transfers, system interrupts. Analog-to-digital and digital-to-analog conversion, addressing modes, motor control, LCD interfaces and basic interfacing techniques including use of EPROMS. Three lecture, two lab hours per week.

Prerequisite(s): EET 261

264 P.C. Troubleshooting & Repair I 3 Cr. Hrs.

Familiarization of circuits, components, malfunctions, and systematic troubleshooting on a P.C.-type microcomputer, including hands-on experience necessary to become proficient in the repair of microcomputers as well as skills in software and hardware diagnostics. Two lecture, two lab hours per week.

265 P.C. Troubleshooting & Repair II 3 Cr. Hrs.

Installation of basic computer operating systems (OS), network hardware topologies, computer peripherals and accessories; identification and resolution of basic computer troubleshooting issues with hardware and relevant software diagnostics.

Prerequisite(s): EET 264

270 EET Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

278 Electronics Project Capstone 4 Cr. Hrs.

Review of electrical circuits, analog and digital electronics, microprocessors; design, fabrication and testing of an electronics project including schematics, wiring diagrams, printed circuit board layout and fabrication; brief presentation and demonstration of working prototype. Two lecture, four lab hours per week.

Prerequisite(s): EET 231 and EET 261

281 Programmable Logic Controllers 3 Cr. Hrs.

Theory and operation of a programmable controller (P.C.) terminology, memory structure, input and output sections, the processor unit, programming devices and counters, Ladder Logic diagrams and logic control. Two lecture, two lab hours per week.

Prerequisite(s): EET 231 or EER 136 or EET 198

282 Advanced Programmable Logic Controller 3 Cr. Hrs.

A hands-on approach to the advanced theory and operation of programmable logic controller (PLC), memory structure, advanced programming instruction, PLC networking, and advanced ladder logic diagrams and logic control. Two lecture, two lab hours per week.

Prerequisite(s): EET 281

283 Introduction to Lasers 3 Cr. Hrs.

Basic concepts and principles associated with characteristics and measurements involving lasers in varied professional and industrial applications. Two lecture, two lab hours per week.

Prerequisite(s): EET 201 or EER 128

284 Optoelectronics 3 Cr. Hrs.

Light Transmission and reception, electroluminescence, photodetection, fiber optic communication, lightwave fundamentals, optic wave guides, light sources, couplers and connectors, modulation and optic heterodyne receiver. Two lecture, two lab hours per week.

Prerequisite(s): EER 128 or EET 201

297 Special Topics in Electronics Engineering Technology
R 1 - 8 Cr. Hrs.

Provides opportunities to receive credit for special interest topics within the discipline. Brief description of the topics will be given and prerequisites identified when offered. Lab time will be part of some content.

Prerequisite(s): Permission of chairperson

Engineering (EGR)

100 Fundamental Mechanical Skills

3 Cr. Hrs.

Utilization of general/specialized hand/power tools that are typically used in the electromechanical industry; use of various dimension measurement devices; simple machine repair procedures from belt replacement to complete subsystem repair; drilling, reaming and tapping holes for various mechanical fasteners; introduction to basic rigging techniques used for moving heavy industrial equipment. One lecture, four lab hours per week.

128 Robotics in CIM Systems

3 Cr. Hrs.

Computer modeling, CNC equipment, CAM software, robotics, and flexible manufacturing systems. The course will be taught using demonstration and discussion combined with individual and team centered project based learning. Two lecture, two lab hours per week.

132 Connecting Technology & Our Lives

3 Cr. Hrs.

History, underlying concepts and effects on community values and quality of life resulting from technological development in Dayton; impact on students and their families; personal and community planning for future changes.

144 Sensors

3 Cr. Hrs.

Introduction to basic sensors used in Computer Integrated Manufacturing (CIM) systems. Theory of operation, wiring, installation, testing and troubleshooting sensors and circuits, proximity switches, limit switches; ultrasonic, laser, photo-reflective, pressure, and temperature sensors, and applications. Two lecture, two lab hours per week.

Prerequisite(s): EET 119

160 Succeeding in Engineering Technology

2 Cr. Hrs.

Overview of unique skills and education needed to have a successful career in an engineering technology career field. Students will review the unique skills needed for their selected technology, set their initial career goals and develop a vision for their early career progress. The course includes an introduction to time management, study skills and the learning environment.

161 Pbasic & Stamp

3 Cr. Hrs.

Pbasic is a simple but versatile programming language used for position and motion control of small scale remotely controlled robotics and other autonomous motion controlled, smart mechanisms utilizing the basic stamp PLD. Two lecture, two lab hours per week.

164 Survey of Engineering Technology

1 Cr. Hr.

An overview of all Engineering Technology disciplines and the skills required for each. Students will perform lab exercises in each engineering technology program, identify the discipline that is best suited to their career goal, and conduct individual research on that discipline. Engineering Technology related field trips and/or guest lecturers may be used to supplement the lab assignments. Two lab hours per week.

210 Human-Machine Interfaces (HMIs)

3 Cr. Hrs.

The basics of Human-Machine Interfaces (HMIs) with emphasis on creating and customizing displays, creating and configuring interactive controls, creating and modifying tags, configuring alarms and security, adding animation, creating data logs, and configuring messages. Two lecture, two lab hours per week.

Prerequisite(s): EET 281

215 Control Systems

3 Cr. Hrs.

Introduction to modern control theory as applied to industrial robotics mechanical unit positioning, accuracy, repeatability, control techniques, with initial focus on three phase electric motors, utilizing various forms of positioning and speed control; pulse width modulation; feedback systems; control techniques for variable speed motors and drive systems; analysis techniques using Laplace transforms; troubleshooting techniques. Two lecture, two lab hours per week.

Prerequisite(s): EER 136 and EER 139 and MAT 132

217 Fluid Power & Control

4 Cr. Hrs.

Fundamentals and basic applications of fluid power components, systems, controls and accessories. The design parameters and the terminology required to specify and plan fluid power systems. Three lecture, two lab hours per week.

Prerequisite(s): EGR 128, EER 166

220 Machine Vision

3 Cr. Hrs.

Analysis of various methods of utilizing vision systems in industrial applications to focus on; hardware, frame grabber board, memory allocation, software development, system troubleshooting and repair and the following application areas; part identification and inspection, part orientation, range finding and image analysis techniques. Two lecture, two lab hours per week.

Prerequisite(s): EGR 252

231 Introduction to Troubleshooting of Automated Systems

3 Cr. Hrs.

Concept of troubleshooting and its importance in manufacturing systems. Basic troubleshooting philosophies, flowchart examination, simple electrical and mechanical troubleshooting. Two lecture, two lab hours per week.

Prerequisite(s): EET 119 or EET 201 and EGR 128

232 Advanced Troubleshooting of Automated Systems

3 Cr. Hrs.

Complex problems experienced in automation systems, building on Introduction to Troubleshooting of Automated Systems (EGR 231). Techniques for troubleshooting systems containing sensors, PLCs, robots, HMIs, and other common automation equipment. Fault determination using troubleshooting software to monitor the performance of small automated systems. Two lecture, two lab hours per week.

Prerequisite(s): EGR 231 and EET 282 and EGR 166 and EGR 210

244 Automation & Control Devices

3 Cr. Hrs.

How to wire, connect, test, program, and interface industrial control devices, peripheral sensors, and computer controlled systems found in Computer Integrated Manufacturing (CIM), Flexible Manufacturing (FM) and robotic workcells. Includes message displays; touch screen I/O devices, barcode readers, sensors; hall effect devices, reed relay, set point modules, micro Programmable Logic Controllers, visual and audio awareness devices; robotic input and output systems. Two lecture, two lab hours per week.

Prerequisite(s): EGR 252 and EET 282

250 Robot Mechanical Unit Repair

3 Cr. Hrs.

This course instructs the student in mechanical teardown. It includes removal and replacement of belts with recalibration through the computer controller. Two lecture, two lab hours per week.

251 Robot Controller Diagnostics

3 Cr. Hrs.

Teaches the student theory of controller operation, function of power input and supply units, command and feedback signals and troubleshooting and diagnostics. Two lecture, two lab hours per week.

Prerequisite(s): EGR 252 and EER 136

252 Teach Pendant Robot Programming

3 Cr. Hrs.

Introduction to Teach Pendant Programming (TPP) for robots, including TPP program development on the teach pendant and through off-line programming software. Programs, tested using Fanuc Robots, will be written for motion control, input/output activation, and palletizing. Two lecture, two lab hours per week.

Prerequisite(s): EGR 128 and EGR 161

255 Industrial Networking 3 Cr. Hrs.

Covers the fundamental industrial automated machine and robot data communication techniques and telemetry used for cell control; data transmission, hardware/software networking protocols; serial, parallel, modulation techniques, multiplexing, optical, radio frequency and selected networking software. Two lecture, two lab hours per week.

Prerequisite(s): EGR 252 and EET 282 and EGR 210

256 Automated Data Acquisition Systems 3 Cr. Hrs.

Application of data acquisition technologies; bar coding, image recognition, optical character recognition, CCD camera images, laser scanning, voice recognition, and radio frequency and microwave transponders; data capture techniques at the site of event with direct transmission to a computer/storage system for processing data. Two lecture, two lab hours per week.

Prerequisite(s): EER 136 and EGR 261 and EGR 252

261 Engineering Problem Solving Using "C" 4 Cr. Hrs.

Computer solutions of engineering problems using C and C++ incorporating, compiling, running, editing and debugging techniques along with language specific functions, array and pointer structures and stream I/O. Three lecture, two lab hours per week.

Prerequisite(s): MAT 131 and EGR 161

262 Advanced C++ Programming Engineering Applications 4 Cr. Hrs.

Solve representative engineering problems using advanced C and C++ commands, with a focus on: writing in object oriented style, computer control of input/output port control, stand-alone executable code, library linking for various applications. Three lecture, two lab hours per week.

Prerequisite(s): EGR 261

270 Engineering Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

278 Automated Manufacturing Project 3 Cr. Hrs.

Performance based review of the major components of the Electromechanical Engineering Technology associate degree program, with emphasis on robot workcell system design, layout and integration of related industrial systems, and skills from the following areas: robots and programming languages, electronic systems, component installation, troubleshooting, mechanical repair, and preventive maintenance. Addi-

tional focus on graphics, word processing, analytical and simulation tools, assembly, testing, troubleshooting and repair of a functional robot workcell. One lecture, four lab hours per week.

Prerequisite(s): EGR 220 and EGR 256 and EET 282 and EGR 232 and ERG 210 and EGR 255

297 Special Topics in Engineering Technology R 1 - 6 Cr. Hrs.

Varied content offerings of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom/seminar or other non-traditional manner.

Prerequisite(s): Permission of department chairperson

Extended Learning (EL)**101 Student Success Experience 2 Cr. Hrs.**

Campus resources overview, general education introduction and skills development; diversity; learning/teaching styles; study skill; planning and goal setting.

Emergency Medical Services (EMS)**105 First Responder 3 Cr. Hrs.**

Designed for the lay person, this course presents skills and solutions related to medical emergencies without the use of advanced medical equipment. Police, safety officers, medical response team members, anyone who may have to begin care of the sick and injured while on the job would benefit from this course. Two and one-half lecture, one-half lab hours per week.

115 EMT-Basic Theory & Practice I 5 Cr. Hrs.

Meeting current standards of National Training Curriculum of EMT-Basic as well as Basic Life Support. First of two courses required for Ohio certification as EMT-B (Basic). Three lecture, four lab hours per week.

Prerequisite(s): Must be 18 years old

116 EMT-Basic Theory & Practice II R 3 Cr. Hrs.

Meeting current standards of National Training curriculum of EMT-Basic. Second of two courses required for Ohio certification as EMT-A (Basic) as well as accommodating EMT Recertification Bridge course through variable credit registration. Successful completion establishes eligibility for state certifying/recertifying exam. One lecture, three lab, one-half clinical hours per week.

Prerequisite(s): EMS 115

117 EMT-Basic Theory & Practice I & II 8 Cr. Hrs.

Caring for sick and injured people, handling emergency situations, and developing self confidence are the areas important within this course. It meets the current standards of National Standard Curriculum of EMT-Basic as well as Basic Life Support. At the end of this course, successful students will be eligible to sit for Ohio certification testing as an EMT-B (Basic). Four lecture, seven lab, one-half clinical hours per week.

Prerequisite(s): Must be at least 18 years old

118 Lab for EMS 117

Laboratory must be taken with EMS 117.

120 EMT-Basic Refresher 2.5 Cr. Hrs.

Ohio EMS Board approved content. Includes key content from National Standard Training Curriculum for EMT-Basics for National Registry recertification. Emphasis on assessment and initial basic management of the critically ill and injured patient including medical and traumatic emergencies. Two lecture and one lab hour per week.

Prerequisite(s): Current certification as EMT-Basic

135 EMT-Paramedic I: Introduction to ALS Care 8 Cr. Hrs.

Following the 1998 National Standard Curriculum for EMT-Paramedics, this course will cover general anatomy and physiology, patient assessment, basic and advanced airway management, pharmacology and pathophysiology. Five lecture, two lab, six clinical hours per week.

Prerequisite(s): Ohio State EMT-Basic Certification

136 EMT-Paramedic II: Cardiovascular Emergencies 8 Cr. Hrs.

Following the 1998 National Standard Curriculum for EMT-Paramedics, emphasis on general anatomy and physiology of the cardiovascular system, assessment, management and evaluation of the cardiac patient. Five lecture, two lab, six clinical hours per week.

Prerequisite(s): EMS 135

137 EMT-Paramedic III: Pediatric & Trauma Emergencies 8 Cr. Hrs.

Following the 1998 National Standard Curriculum for EMT-Paramedics, emphasis on assessment, management and evaluation of the pediatric, obstetric, and or trauma patient. Five lecture, two lab, six clinical hours per week.

Prerequisite(s): EMS 136

138 EMT-Paramedic IV: The Medical Patient 8 Cr. Hrs.

Following the 1998 National Standard Curriculum for EMT-Paramedics, emphasis on care and management of the medical patient focusing on hematology, endocrine, gastroenterology, allergic reactions, renal emergencies, gerontology, toxicology and behavioral emergencies. Five lecture, two lab, six clinical hours per week.

Prerequisite(s): EMS 137

139 EMT-Paramedic V: Integration 7 Cr. Hrs.

Following the 1998 National Standard Curriculum for EMT-Paramedics, emphasis on integrating skills from the preceding four quarters. Other areas covered include mass casualty, EMS research, crime scene management, and ethics within EMS care. Four lecture, two lab, eight clinical hours per week.

Prerequisite(s): EMS 138

150 EMT-Paramedic Refresher 4 Cr. Hrs.

This course meets all Ohio state requirements as a paramedic recertification course. Designed for the practicing paramedic, EMS 150 places emphasis on assessment and initial management of the critically ill and injured patient including medical and traumatic emergencies and enhancing knowledge and skills. Three lecture, two lab hours per week.

Prerequisite(s): Ohio state certification as an EMT-paramedic

Engineering & Industrial Technologies (EN)**101 Student Success Experience 2 Cr. Hrs.**

Campus resources overview, general education introduction and skills development; diversity; learning/teaching styles; study skill; planning and goal setting.

English (ENG)**111 English Composition I 3 Cr. Hrs.**

Pre writing, drafting, revision, editing, audience awareness, controlling theme and thesis development through reflective, informational, and argumentative writing based on student's experience; critical reading skills.

Prerequisite(s): DEV 110 or DEV 130 and DEV 065 or equivalent

112 English Composition II 3 Cr. Hrs.

Further development of writing skills with emphasis on critical reading, reasoning, and argumentation; the research process and the research paper.

Prerequisite(s): ENG 111

113 English Composition III 3 Cr. Hrs.

Continuing development of expository writing skills with emphasis on critical writing. Study of literature provides material for student essays.

Prerequisite(s): ENG 112

116 Advanced Vocabulary Building 3 Cr. Hrs.

Builds English vocabulary through the study of component parts in words; namely, Greek and Latin roots, prefixes and suffixes. Emphasis on words commonly encountered in higher education with emphasis on legal, medical, and scientific terminology.

Prerequisite(s): ENG 111

121 Technical Composition I 3 Cr. Hrs.

Composition skills and critical writing and reading for students in the technical fields, focusing on prewriting, drafting, revision, editing, and audience awareness through expository and analytical writing; introduction to the forms of technical writing and technical communication.

Prerequisite(s): DEV 110

122 Technical Composition II 3 Cr. Hrs.

Further development of critical writing and reading skills for students in the technical fields with emphasis on informal and formal report writing, including research and documentation techniques.

Prerequisite(s): ENG 121

131 Business Communications I 3 Cr. Hrs.

The four major types of business letters, emphasizing use of correct grammar, punctuation, spelling, and vocabulary.

Prerequisite(s): DEV 110 or ENG 111

132 Business Communications II 3 Cr. Hrs.

Principles and skills for writing a resume and letter of application, short reports, and a formal business report involving library research and documentation techniques.

Prerequisite(s): ENG 131

199 Text Editing 3 Cr. Hrs.

Strategies to achieve a clear, concise, cohesive, emphatic writing style; sentence structure; contemporary grammar and usage

Prerequisite(s): ENG 111 and ENG 112 or ENG 131 and ENG 132

245 Introduction to Linguistics 3 Cr. Hrs.

Modern linguistic studies including processes of linguistic change, grammar as a formal system, and historic and comparative language study.

Prerequisite(s): ENG 112

247 The Art of Film R 3 Cr. Hrs.

Viewing, analyzing, writing about American and international films.

250 Personal Essay: Advanced Composition 3 Cr. Hrs.

Sophisticated techniques of expository writing and the refinement of style.

Prerequisite(s): ENG 112

255 Creative Writing: Poetry 3 Cr. Hrs.

Writing and critical reading of poetry. Manuscript form, publication, and market information.

256 Creative Writing: Fiction 3 Cr. Hrs.

Writing and critical reading of short stories. The various techniques of fiction writing, such as plot, character, dialogue, and conflict.

257 Freelance Writing 3 Cr. Hrs.

Freelance magazine and newspaper article writing. Emphasizes generating, researching, developing non-fiction prose; presentations by professional writers in various fields.

258 Advanced Fiction Writing 3 Cr. Hrs.

Advanced study of traditional short story elements in a workshop setting; the mechanics of manuscript submission.

Prerequisite(s): ENG 256

259 Writing the Novel 3 Cr. Hrs.

Study of traditional novel elements and the mechanics of manuscript submission in a workshop setting.

Prerequisite(s): ENG 256 or permission of instructor

260 Memoir Writing 3 Cr. Hrs.

Writing and reading of autobiographical essays in a workshop setting.

264 Advanced Poetry Writing 3 Cr. Hrs.

Advanced study of the elements of poetry, including the mechanics of manuscript submission, in a workshop setting.

Prerequisite(s): ENG 255 or permission of instructor

297 Special Topics in English R 1 - 6 Cr. Hrs.

Opportunity to study specialized rhetorical and linguistic topics such as stylistics, sentence-combining, heuristics, history of English, dialects.

Entrepreneurship (ENT)

105 Introduction to Entrepreneurship 3 Cr. Hrs.

An introduction to a challenging and rewarding career as an entrepreneur. The role of small businesses in the U.S. and the impact on the national and global economy. Addresses skills and commitment necessary for a successful entrepreneurial venture, various entrepreneurial types, and talent/aspiration self-assessment. Highlights successful practices of entrepreneurs and skills necessary to identify potential entrepreneurial opportunities.

210 Small Business Management 3 Cr. Hrs.

Management techniques vital to the success of small entrepreneurial businesses, including decision making skills in the areas of start-up, legal structure, marketing, financial planning, human resources, and operations management.

Prerequisite(s): ENT 105

220 Small Business Marketing 3 Cr. Hrs.

Essential marketing skills for entrepreneurial ventures, utilizing innovative marketing strategies. Analysis of marketing philosophies implemented by successful entrepreneurs, and preparation of a thorough marketing plan that can be used to launch or grow an entrepreneurial venture.

240 Small Business Finance 3 Cr. Hrs.

Identification and evaluation of the various sources available for funding a small business. Financial terminology; reading, preparing, and analyzing financial statements typical of a small entrepreneurial business; and preparing and presenting a loan proposal to a financial institution. Also includes ways to overcome the typical financial obstacles encountered by entrepreneurs.

260 Business Plan Development 4 Cr. Hrs.

Business concept evaluation and sound business plan development. Business concept strengths and weaknesses assessment, organizational structure planning, marketing plan research, data collection, and organization; preparation of financial projections; identification and evaluation of various resources available for funding a new or existing enterprise. Extensive writing expected and use of the Internet required. The successful student will leave the course with a complete and ready-to-use business plan document.

278 Entrepreneurship Capstone 1 Cr. Hr.

Assessment of achievement by Entrepreneurship Concentration students through project based activities and portfolio review. Student demonstration of the achievement of degree concentration outcomes via oral and written presentations, portfolio development, and the creation of a professional growth plan.

Prerequisite(s): MAN 216 and ECO 218 and ENT 210 and restricted to majors and approval of chairperson

Engineering Technology Design (ETD)

100 Gateway to Technology 3 Cr. Hrs.

Overview of the field of technology and its related processes. Course activities include (1) Design and Modeling, (2) The Magic of Electrons, (3) The Science of Technology, and (4) Automation and Robotics. Two lecture, two lab hours per week.

101 Introduction to Engineering Design 3 Cr. Hrs.

An introductory course in design skills and tools utilizing 3-D parametric tools (Inventor) in the creation of design projects. Development of skills in Parametric Part creation, assembly modeling, and documentation of designs; additional topics in sketching, design for production, presentations and marketing. Two lecture, two lab hours per week.

Co-requisite: MAT 131

102 Principles of Engineering 3 Cr. Hrs.

Development of student understanding of the engineering/engineering technology field. Through exploration of various technology systems and manufacturing processes, students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. Also includes concerns about social and political consequences of technological change. Two lecture, two lab hours per week.

Prerequisite(s): ETD 101 and MAT 131

110 Engineering Design & Development 3 Cr. Hrs.

An engineering research course in which students work in teams to research, design and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses; students also present progress reports, submit a final written report and defend solutions to a panel of outside reviewers. Two lecture, two lab hours per week.

Prerequisite(s): ETD 102 and EGR 128 and EET 198

118 Introduction to the Product Realization Process 1 Cr. Hr.

Processes for the formulating and substantiating ideas and concepts for the design of systems, components, and technical processes.

121 Skills for the Engineering Technology Professional 3 Cr. Hrs.

Introduction to the core skills of a design engineer: technical skills, soft skills and team management techniques. A focus on different design communication techniques (oral, written, pictorial). Concepts of lifelong learning, continued personal improvement, engineering ethics, working in a diverse industry and future trends in engineering technology will be explored. Two lecture, two lab hours per week.

128 Print Reading with GD&T 3 Cr. Hrs.

Training in the interpretation of engineering drawings. Includes principles of orthographic projection, drafting symbols, surface finish symbols, welding symbols, and geometric dimensioning and tolerancing symbols. Two lecture, two lab hours per week.

160 Mechanics for Skilled Trades 3 Cr. Hrs.

Fundamentals of mechanics, including concepts of force, work, energy, stress, friction and basic properties of materials. Analysis of simple mechanical machines.

Prerequisite(s): DEV 108 or permission of instructor

161 Advanced Mechanics for Skilled Trades 3 Cr. Hrs.

Fundamentals of mechanics as applied to the actual hardware and equipment used in production environment.

Prerequisite(s): MET 101 or ETD 160

165 Industrial Hydraulics I 3 Cr. Hrs.

Basic principles of hydraulics, hydraulic fluids, reservoirs, pumps, cylinders, motors, piping, and accessories with application of hydraulic circuit layout and control including pressure, directional, and speed control, sequencing, flow division, and cushioning. Two lecture, two lab hours per week.

Prerequisite(s): MAT 101 or equivalent

166 Industrial Hydraulics II 3 Cr. Hrs.

This is the second course in the Hydraulics sequence. It builds on the previous course with additional topics of actuators and controls. Two lecture, two lab hours per week.

Prerequisite(s): ETD 165 or MET 151

167 Industrial Hydraulics III 3 Cr. Hrs.

Principles and components of a hydraulic system with a focus on electrohydraulic systems, symbology, basic circuit layout and assembly of electrohydraulic systems. Two lecture, two lab hours per week.

Prerequisite(s): MET 152 or ETD 166

198 Personal Computer Applications for Engineering Technology**2 Cr. Hrs.**

Applied computer tools to solve engineering technology problems emphasizing the integration of word processing, draw function, spreadsheets, databases, and engineering research skills using the Internet. Applications of an integrated approach to research papers, engineering technology analysis, technical laboratory reports and technical presentation. One lecture, two lab hours per week.

Prerequisite(s): DEV 085

199 Introduction to Computer-Aided Drafting Concepts**2 Cr. Hrs.**

P.C. based computer-aided drafting, including two-dimensional drawing, drawing layout and sizing, drawing and editing commands, drawing magnification, and drawing output using the latest release of AutoCAD. One lecture, two lab hours per week.

Prerequisite(s): DRT 196 or ARC 138 and MET 198 or ARC 101 and MET 198 or ARC 101 and BIS 160 or ETD 128 or ARC 138 and ETD 198 or ARC 101 or ARC 101 and ETD 198

202 Applied Statics & Dynamics**4 Cr. Hrs.**

Applied non-calculus based knowledge of classical statics and dynamics, including the applications of single and multiple particle dynamics and systems.

Prerequisite(s): ETD 102

211 Engineering Mechanics I**5 Cr. Hrs.**

Vectorial treatment of forces and analysis of trusses, centroids, friction and moment of inertia. This calculus-based course is designed for Engineering Science university parallel students.

Prerequisite(s): MAT 216 and PHY 201

212 Engineering Mechanics II**5 Cr. Hrs.**

Kinematics of particles and rigid bodies, acceleration, work-energy, impulse and momentum of particles and rigid bodies.

Prerequisite(s): MET 211 or ETD 211

213 Statics**4 Cr. Hrs.**

Various types of force systems, analysis of trusses, friction, center of gravity and moments of inertia.

Prerequisite(s): MAT 132 and PHY 131

222 Strength of Materials**4 Cr. Hrs.**

Stress and deformations, torsions, shear and moments in beams, stresses in beams, beam deflections, combined stresses, and eccentric loading. Two lecture, four lab hours per week.

Prerequisite(s): MET 203 or ETD 213 or ETD 202

225 Introduction to Nanotechnology**3 Cr. Hrs.**

General exposure to nanotechnology and its applications, including manufacturing, engineering, and material technologies. Introduction to the impacts of nanotechnology, current developments in the nano field, and discussion of the potential influence of nanotechnology on careers.

228 Emerging Technology Tools**1 Cr. Hr.**

Trends and global issues within the design industry: Product Lifecycle Management (PLM) concepts in document management, green manufacturing, collaborative communication techniques, rapid prototyping/tooling and the application of new design tools, techniques and the integration of several software tools.

Prerequisite(s): ETD 110

230 Introduction to Geometric Design & Tolerancing**3 Cr. Hrs.**

Develop an understanding of the geometric dimensioning and tolerancing system, incorporating dimensioning of parts with respect to the function of the part. Two lecture, two lab hours per week.

Prerequisite(s): DRT 196 and INT 109 or ETD 128 and INT 109 or ETD 101 and ETD 128

231 Advanced Design Interpretation**3 Cr. Hrs.**

An advanced course in Geometric Design and Tolerancing (GD&T) for experienced machinists. Three lecture hours per week.

238 Product Development & Testing**2 Cr. Hrs.**

Designing for all factors that are desirable: safety, manufacturability, environment, durability, reliability, and maintainability. Analysis and assessment of the effectiveness of a design over its lifecycle through prototype testing and rapid prototyping.

Prerequisite(s): ETD 228

240 Machine Design I**3 Cr. Hrs.**

Principles of dynamics; kinetics and kinematics of rectilinear motion and rotation of bodies, curvilinear motion, work, energy and power; gear design basics. Two lecture, two lab hours per week.

Prerequisite(s): ETD 222 and PHY 131

245 Machine Design with CAD**4 Cr. Hrs.**

An advanced parametric modeling course focused on the development of assemblies using machine design principles, hydraulic and pneumatic lines, gears, belts, connections, fasteners, and shaft design. Exposure to rapid prototyping for design visualization is also accomplished. Three lecture, two lab hours per week.

Prerequisite(s): ETD 240

260 Engineering Technology Applications with Computers**3 Cr. Hrs.**

Computer solutions of engineering problems using MathCAD; algorithms, numerical analysis and matrix methods for problem solving of physical principles and engineering applications. Two lecture, two lab hours per week.

Prerequisite(s): MET 198 or IET 198 or ETD 198 and MAT 133

270 Engineering Technology Design Internship**R 1 - 12 Cr. Hrs.**

Preparing a portfolio based on work related/on-the-job experience. One to twelve hours per week.

278 Engineering Technology Design Capstone**4 Cr. Hrs.**

Assessment of achievement by Engineering Technology Design students in attaining program outcomes by completing a project demonstrating principles and practices of the major. Team work on projects will be emphasized. One lecture, six lab hours per week.

Prerequisite(s): Approval of chairperson

280 Advanced Computer Aided Drafting**3 Cr. Hrs.**

Study and application of advanced drawing using computer graphic systems. Major emphasis on 2-D commands with an introduction to 3-D drawings. Two lecture, two lab hours per week.

Prerequisite(s): DRT 198 and MET 198 or ETD 199 and ETD 198

284 Solidworks Basics**5 Cr. Hrs.**

Utilize SolidWorks mechanical design automation software to build parametric models of parts and assemblies and learn how to make drawings of those parts and assemblies. Two lecture, six lab hours per week.

Prerequisite(s): DRT 196 or ETD 128

287 Solid Edge Basics**5 Cr. Hrs.**

A computer aided drafting course using Solid Edge with information for new users on how to get started with the software. Emphasis on the development of basic skills and methods to create solid models. Two lecture, six lab hours per week.

Prerequisite(s): DRT 196 or ETD 128

291 Unigraphics Basics**5 Cr. Hrs.**

An introduction to Unigraphics® 3-D Modeling software intended for new Unigraphics® users or individuals with basic CAD skills. Emphasis will be placed on the development of basic skills and methods to create solid models. Two lecture, six lab hours per week.

Prerequisite(s): DRT 196 or ETD 128

297 Special Topics in Engineering Technology Design R 1 - 6 Cr. Hrs.

Varied content offering of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom/seminar setting or in non-traditional format such as TV, videotape, etc. One to six lecture hours per week.

Environmental Technology (EVT)

106 Air Pollution Control 3 Cr. Hrs.

Chemicals that are air pollutants; sources of air pollution; particularly chemical; monitoring techniques and control methods with applicable federal and state air pollution acts, amendments, and standards. Two lecture, two lab hours per week.

Prerequisite(s): EVT 110 and CHE 131

107 Water Management Technology 3 Cr. Hrs.

Causes of water pollution; methods of contaminate identification and source site identification; Clean Water Act; and applicable state regulations. Two lecture, two lab hours per week.

Prerequisite(s): EVT 110 and CHE 131 and MAT 131

110 Environmental Compliance 3 Cr. Hrs.

Introduction to the acts and regulations governing the production, treatment, transportation, and disposal of hazardous materials/wastes. Two lecture, two lab hours per week.

120 Environmental Sampling & Analysis 3 Cr. Hrs.

Sampling and analysis techniques for environmental compliance are discussed in detail. Sampling methods and protocols are presented and sampling plans developed. Environmental monitoring is explained with emphasis on air quality, surface water and groundwater. Two lecture, two lab hours per week.

180 Solid Waste Management 3 Cr. Hrs.

Identify, describe and use the various methods and basic design concepts of solid waste treatment and disposal. Design concepts include landfilling, incineration, recycling and composting. Federal and state regulations are also presented and discussed. Two lecture, two lab hours per week.

200 Environmental Waste Management 4 Cr. Hrs.

Environmental reduction of hazardous waste that is generated prior to treatment, storage, or disposal in industry and the public sector; methods to minimize waste production for small and large quantity generators.

Prerequisite(s): EVT 110

210 Environmental Site Assessment 4 Cr. Hrs.

Environmental liability aspects of property transfer; environmental liability reduction; records review; on-site inspection; site assessment for transfer of single family, multiple family, and commercial properties required by private and governmental organizations. Three lecture, two lab hours per week.

215 Asbestos Management 3 Cr. Hrs.

Instruction in the management, identification and removal of asbestos. Emphasis on management, safety, effects of asbestos on the human body, asbestosis disease, identification and removal techniques, personal protective equipment, decontamination and disposal techniques. Two lecture, two lab hours per week.

216 Lead Management 3 Cr. Hrs.

Instruction in the management, identification and removal of lead. Emphasis on management, safety, effects of lead on the human body, associated diseases, identification and removal techniques, personal protective equipment, decontamination and proper disposal techniques. Two lecture, two lab hours per week.

217 Confined Space Management 2 Cr. Hrs.

A detailed examination of the regulations and procedures required for entry into confined spaces. Analysis of the hazards of confined spaces and below ground environments as well as the application of confined space entry techniques are covered. One lecture, two lab hours per week.

240 Groundwater/Basic Fluid Mechanics 4 Cr. Hrs.

Examination of the basic concepts of the hydrologic cycle, hydrogeology, aquifers, groundwater supply and demand, contamination and decontamination. Techniques of groundwater protection are discussed and analyzed. Fluid flow types, laminar flow and turbulent flow, are presented. The principles of flow in open channels and pipes are discussed. Flow in natural as well as engineered systems is also analyzed. Two lecture, four lab hours per week.

Prerequisite(s): PHY 131 and MAT 133

260 Treatment, Storage, & Disposal of Hazardous Materials 3 Cr. Hrs.

Introduction to the treatment, storage, and disposal of hazardous wastes, or hazardous constituents, including land disposal, surface impoundment, solidification, incineration, and disposal management. Two lecture, two lab hours per week.

Prerequisite(s): EVT 110 or SRM 101 and CHE 131 or equivalent

265 Remediation 3 Cr. Hrs.

Overview of the corrective action process related to contamination at Resources Conservation and Recovery Act permitted facilities. Description and evaluation of remedial technologies. Two lecture, two lab hours per week.

Prerequisite(s): EVT 260 and MAT 132 and CHE 131

278 Environmental Capstone 3 Cr. Hrs.

Assessment of achievement by Environmental Engineering Technology degree students in attaining program outcomes by employing reflective learning through demonstration of environmentally related principles and practices. Two lecture, two lab hours per week.

Prerequisite(s): Permission of chairperson

Extended Learning (EXL)

102 Spelling & Vocabulary 4 Cr. Hrs.

Techniques for mastering spelling and expanding vocabulary, including the following topics and activities: dictionary and thesaurus use, phonetic transcription, connotation/denotation, context clues, euphemism, Greek and Latin roots, prefixes/suffixes, visual memory practice, and word games.

Prerequisite(s): DEV 074, DEV 064

105 Study Skills 2 Cr. Hrs.

The purpose of this course is to help students develop habits and concepts of practical and sound study skills and to enable them to transfer these skills into the content area subjects. This course provides basic study skills including time management, concentration, memory, textbook reading, organization of information, listening and notetaking from lectures, test taking, and library skills.

Prerequisite(s): DEV 063 or DEV 064 and DEV 074 and DEV 084

140 Speed Reading 2 Cr. Hrs.

Development of increased reading speed and comprehension. Includes reading strategies to increase speed, comprehension, and efficiency in processing written information through the use of regulators and speed reading software.

Prerequisite(s): DEV 065 or equivalent

297 Special Topics in Extended Learning R 1 - 6 Cr. Hrs.

Opportunities to receive credit for non-traditional courses such as courses by TV or web, as well as, special interest topics. Objectives will vary with the particular content area. Course is repeatable as topics change.

Financial Management (FIN)

105 Introduction to Financial Institutions 3 Cr. Hrs.

Overview of financial institutions, including the money creation function of the commercial banking system, the history and roles of various financial institutions, their services and operations.

200 Consumer Credit 3 Cr. Hrs.

Nature and function of retail and mercantile credit, interchange services and uses, financial statement analysis, interpretation of credit reports, and collection procedures.

Prerequisite(s): FIN 105

202 Consumer Credit Counseling 3 Cr. Hrs.

Skills and practice necessary to provide financial counseling services. Includes diagnosis of financial problems and their causes; effective questioning and listening techniques; ethical responsibilities of counselors; credit management strategies; and the development of debt management plans.

Prerequisite(s): FIN 200, FIN 105

205 Commercial Credit 3 Cr. Hrs.

A survey of the operation of a commercial credit office. Organizations, policies and procedures of a commercial office, sources of credit information, legal aspects of collections and analysis of a financial statement.

Prerequisite(s): FIN 200

208 Sports Finance 3 Cr. Hrs.

Aspects of collegiate and professional sport finance. Challenges, trends, economic impact, organizational structure, sources of funds, player payroll, operations management, financial management, ownership transfers, and taxation of sport enterprises will be covered.

215 Corporation Finance 3 Cr. Hrs.

Internal and external financing of a modern corporation. Finance and its relationship to the overall operation and management of the corporation. Financial analysis and planning; cash budgets, short and long term financing; and asset management.

Prerequisite(s): ACC 113 or ACC 122

245 Personal Finance 3 Cr. Hrs.

Household budgeting, use of charge accounts, insurance and savings as investment. Buying and selling of securities.

246 Principles of Investment 3 Cr. Hrs.

For non-professional investors interested in expanding their knowledge and awareness of the stock market and its environment.

255 Money & Capital Markets 3 Cr. Hrs.

Fundamentals of money and how it functions in the United States and world economies. This course explores money as a medium of exchange. Students are introduced to the concept of money supply and the role of banks as money creators and participants in the nation's payment mechanism. Different financial institutions are analyzed.

Prerequisite(s): ECO 202 or ECO 216

260 Employee Benefits 3 Cr. Hrs.

Exploration of the range of benefits available to employees through group plans in order to make students educated consumers and prepare them for employment in financial institutions. An examination of employee benefits in relationship to an employee's financial health.

270 Financial Management Internship R 3 Cr. Hrs.

Credits toward degree requirements for work experiences. Learning experiences relate to the financial services industry.

Prerequisite(s): FIN 105

295 Financial Management Seminar 3 Cr. Hrs.

Application of previously learned financial management principles. This course will serve as an overall assessment of the students' learning within the financial management program. Case studies, readings, ethics, and discussions of issues that impact modern financial institutions are covered. Demonstration of competency in the program learning outcomes and financial management principles and practices. Students will work collaboratively to solve complex financial management problems.

Prerequisite(s): FIN 205, FIN 245, FIN 246 and ACC 113 or ACC 122 and MAT 122 and ECO 216. 80 credit hours

297 Special Topics in Financial Management R 0.5 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (such as TV and newspaper) as well as special interest topics within the discipline.

Fine & Performing Arts (FP)

101 Student Success Experience 2 Cr. Hrs.

Campus resources overview, general education introduction and skills development; diversity; learning/teaching styles; study skill; planning and goal setting.

French (FRE)

100 Introduction to French Conversation, Language, & Culture 3 Cr. Hrs.

Basic introductory levels of speaking in conversational settings, using knowledge of French-speaking cultures. May not be taken for credit if the student has completed FRE 101 or any other first or second-year French course.

101 Elementary French I 4 Cr. Hrs.

Foundation for understanding, speaking, reading, and writing French. Language laboratory work may be required.

102 Elementary French II 4 Cr. Hrs.

Foundation for understanding, speaking, reading, and writing French. Language laboratory work may be required.

Prerequisite(s): FRE 101

103 Elementary French III 4 Cr. Hrs.

Foundation for understanding, speaking, reading, and writing French. Language laboratory work may be required.

Prerequisite(s): FRE 102

201 Intermediate French I 4 Cr. Hrs.

Reviews and extends basic principles through composition and conversation, stressing fluency. Language laboratory work may be required.

Prerequisite(s): FRE 103

202 Intermediate French II 4 Cr. Hrs.

Reviews and extends basic principles through composition and conversation, stressing fluency. Language laboratory work may be required.

Prerequisite(s): FRE 201

203 Intermediate French III 4 Cr. Hrs.

Reviews and extends basic principles through composition and conversation, stressing fluency. Language laboratory work may be required.

Prerequisite(s): FRE 202

Fire Science Technology (FST)

101 Introduction to Fire Science

4 Cr. Hrs.

Principles of combustion, extinguishment, ventilation calculations, heat transfer, and the combustible properties of fuels; history of life and property loss by fire.

102 Fire Protection & Organization

4 Cr. Hrs.

The organization and function of public, governmental, and private sector fire protection agencies; applications of various insurance rate making methods including the Insurance Service Office Fire Suppression Rating Schedule.

103 Fire Prevention Fundamentals, Codes, & Ordinances

4 Cr. Hrs.

Interpretation and application of the Ohio Fire Code and the Life Safety Code (NFPA 101); enforcement of fire codes and statutes and the legal ramifications.

115 Fire Apparatus & Equipment

3 Cr. Hrs.

Construction, operation and maintenance of pumping engines, aerial ladder trucks and platforms, and specialized fire equipment. Two lecture, two lab hours per week.

116 Fire Protections Systems I

3 Cr. Hrs.

Principles of design, application, and operation of fire detection, alarm and suppression systems and portable fire extinguishers based on the applicable standards of the National Fire Codes. Two lecture, two lab hours per week.

117 Fire Protection Systems II

3 Cr. Hrs.

Design, installation and maintenance of: fire detection systems and chemical fire suppression systems using appropriate national fire codes. Two lecture, two lab hours per week.

Prerequisite(s): FST 116

120 Fire Safety Inspector

6 Cr. Hrs.

Fire hazard identification; fire hazard abatement; fire inspection procedures; fire code compliance; public fire safety education; application of fire codes and standards and fire hazards associated with special material and equipment. Four lecture, four lab hours per week.

Prerequisite(s): Permission of chairperson

125 Fire Investigation Procedure

4 Cr. Hrs.

Techniques used to determine the point of origin and cause of a fire; methods and motives for fire setting; State of Ohio statutes on arson and related offenses and trial preparation and presentation.

Prerequisite(s): FST 101 or FST 181 or permission of chairperson

152 Technical Rescue Refresher

R 2 Cr. Hrs.

Practical application to assure that the student has maintained pertinent knowledge, skills and information required to handle technical rescue emergencies. Emphasis will be on personal safety, site hazards, personal protective equipment and incident management. Two lecture, two lab hours per week.

Prerequisite(s): FST 171 and FST 179 or Level I Firefighter

169 Rapid Intervention Team

R 2 Cr. Hrs.

An examination of procedures, skills and techniques needed to operate as a member of a Rapid Intervention Team (RIT). Covered will be the fire scene factors involved in implementing a RIT. Completion of several practical exercises will be required. This course meets the requirements of the Rapid Intervention Team component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. One lecture, two lab hours per week.

Prerequisite(s): FST 171 and FST 179

170 Technical Rescue Awareness

1 Cr. Hr.

Introduction to the issues and concerns that emergency first responders must deal with when first on the scene of a technical rescue incident. Includes first responder's responsibilities in emergency response to a rescue incident, recognizing technical rescue incidents and related dangers, how to initiate the proper technical rescue response and stabilizing the rescue scene.

171 Introduction to Technical Rescue

3 Cr. Hrs.

An overview of the National Fire Protection Association Technical Rescue Standards 1670 with emphasis on the role of technical rescue in emergency response, application of the physics concepts needed for technical rescue and the application of Incident Management System (IMS) within the framework of the rescue program.

172 Vehicle Rescue

2 Cr. Hrs.

An examination of procedures and skills involved in the extrication of a victim from a vehicle accident. Covered will be the proper use of a variety of rescue equipment and the Incident Management System requirements of vehicle rescue. Completion of several practical exercises will be required. This course meets the requirements of the vehicle rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. One lecture, two lab hours per week.

Prerequisite(s): FST 169 and FST 171 and FST 173 and FST 179

173 Rope Rescue

3 Cr. Hrs.

A detailed examination of the rescue procedures and techniques for victims involved in emergency situations that include high angles and/or great heights and distances. Completion of a series of practical exercises is required. This course meets the requirements of the rope rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. Two lecture, two lab hours per week.

Prerequisite(s): FST 169 and FST 171 and FST 179

174 Confined Space Rescue

3 Cr. Hrs.

A detailed examination of the removal of a victim from a confined space. Analyses of the hazards of confined spaces and below ground environments as well as the application of confined space rescue techniques are covered. Completion of a series of practical exercises is required. This course meets the requirements of the confined space rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. Two lecture, two lab hours per week.

Prerequisite(s): FST 169 and FST 171 and FST 173 and FST 179

175 Machine/Rigging Rescue

2 Cr. Hrs.

An examination of the extrication of a victim trapped from an accident involving heavy machinery. Covered will be the proper use of the appropriate rescue equipment, the Incident Management System requirements of machinery rescue and the disassembling of complex machines. Completion of a practical exercise is required. This course meets the requirements of the machine rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. One lecture, two lab hours per week.

Prerequisite(s): FST 169 and FST 171 and FST 172 and FST 173 and FST 179

176 Trench Rescue

2 Cr. Hrs.

Examination of the extrication of an individual trapped in a collapsed excavation trench. Covered will be the trench settings and environments, proper use of rescue tools and apparatus, proper shoring techniques, stabilization of the trench area and the incident management requirements of a trench rescue. Completion of a practical exercise is required. This course meets the requirements of the trench rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. One lecture, two lab hours per week.

Prerequisite(s): FST 169 and FST 171 and FST 172 and FST 173 and FST 179

177 Building Collapse Rescue 3 Cr. Hrs.

This course is a component of the Basic Emergency Rescue Technician program, which includes an examination of the rescue needs of victims trapped during a structural collapse. Assessing structural integrity, stabilizing structural members, proper use of rescue equipment during structural collapse rescue and the Incident Management System requirements during structural collapse operations are also included. Completion of a practical exercise is required. This course meets the requirements of the collapsed building rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. Two lecture, two lab hours per week.

Prerequisite(s): FST 169 and FST 171 and FST 172 and FST 173 and FST 176 and FST 179

178 Swift Water Rescue 3 Cr. Hrs.

An examination of the rescue needs of victims involved in water emergencies that are primarily on the surface of either a static or dynamic water body. Course will cover assessing water emergencies, weather considerations, rigging, water craft needs and limitations, victim removal and Incident Management Systems requirements. This course meets the requirements of the swift water rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. Two lecture, two lab hours per week.

Prerequisite(s): FST 169 and FST 171 and FST 173 and FST 179

179 Victim Location, Operation Level 2 Cr. Hrs.

An examination of the procedures needed to locate missing individuals due to actions that might or might not be within their control. Includes fundamentals of search operations, search tactics and strategies and Incident Management Systems requirements. Completion of a practical exercise is required. This course meets the requirements of the victim rescue component of the National Fire Protection Association (NFPA) Standard on Technical Rescue Training 1670. One lecture, two lab hours per week.

Prerequisite(s): FST 171

180 Firefighter II 16 Cr. Hrs.

Basic, intermediate and advanced instruction in fire suppression, fire chemistry and behavior, rescue, firefighting tools, appliances and equipment, built-in fire suppression systems and firefighting safety, rescue and survival. Six lecture, 20 lab hours per week.

Prerequisite(s): Permission of chairperson

181 Firefighter I 8 Cr. Hrs.

Basic and intermediate instruction in fire suppression; fire chemistry and behavior; rescue; firefighting tools, appliances, equipment, built-in fire suppression systems and firefighting safety, rescue and survival. Three lecture, ten lab hours per week.

Prerequisite(s): Permission of chairperson

182 Advanced Firefighting Procedures 8 Cr. Hrs.

A refresher and refinement of professional fire suppression skills to include advanced instruction in fire suppression; fire chemistry and behavior; rescue; firefighting tools, appliances and equipment; built-in fire suppression systems and firefighting safety and survival. Three lecture, ten lab hours per week.

Prerequisite(s): FST 193 and two years firefighting experience and must have own SCBA and turn-out gear and approval of chairperson

191 Volunteer Firefighter 3 Cr. Hrs.

Basic instruction in fire suppression; fire chemistry and behavior; rescue; firefighting tools, appliances and equipment and firefighting safety and survival.

Prerequisite(s): Permission of chairperson

192 Firefighter I Transition 5 Cr. Hrs.

Intermediate instruction in fire suppression; fire chemistry and behavior; rescue; firefighting tools, appliances and equipment; built-in fire suppression systems and firefighting safety, rescue and survival. Two lecture, six lab hours per week.

Prerequisite(s): FST 191

193 Firefighter II Transition 8 Cr. Hrs.

Advanced instruction in fire suppression; fire chemistry and behavior; rescue; firefighting tools, appliances and equipment; built-in fire suppression systems and firefighting safety and survival. Three lecture, ten lab hours per week.

Prerequisite(s): FST 192

194 Fire Brigade Training 3 Cr. Hrs.

Basic instruction in extinguishing fire in the incipient stage. Instruction includes fire chemistry and behavior, rescue, operation of sprinkler systems and stand pipes and operation of fire extinguishers. This course meets the requirements of 29 CFR 1910 Subpart L, 1910.156 Fire Brigade. Two lecture, two lab hours per week.

201 Fire Hydraulics 5 Cr. Hrs.

Fundamental principles of water movement through pipe and fire hose; application of formulas to solve friction loss, flow rate, engine and nozzle pressures; evaluation of water supplies and sprinkler requirements. Four lecture, two lab hours per week.

Prerequisite(s): MAT 131 or MAT 116

202 Building Construction 4 Cr. Hrs.

Fundamentals of building construction; design and materials as fire protection features; hazards, venting, heating, air conditioning structures; demolition and evaluation considerations to high density areas with high fire hazard potential.

204 Water Suppression Systems 4 Cr. Hrs.

Code requirements for the design, installation and maintenance of automatic sprinkler systems, types of systems and their applications to fire protection. Three lecture, two lab hours per week.

Prerequisite(s): FST 201

205 Fire Administration I 4 Cr. Hrs.

Duties and responsibilities of the fire officer, administrative techniques to assist the officer in planning, organizing, leading and evaluating activities. Preparing reports and maintaining records.

Prerequisite(s): FST 102 and FST 115

206 Incident Command System 4 Cr. Hrs.

Emergency scene operations management, fundamental principles of effective placement and utilization of apparatus and personnel to resolve emergencies in a safe and efficient manner. Pre-emergency planning, organization, staging and sectorization. Two lecture, four lab hours per week.

207 Fire Administration II 4 Cr. Hrs.

Planning, organizing, staffing, budgeting, and creativity needed for solving fire department's problems affecting the fire protection delivery system.

Prerequisite(s): FST 102 and FST 205

208 Incident Command System II 4 Cr. Hrs.

The principles of preparation and coordination of an emergency response agency to major disasters. Disaster planning, inter-agency coordination, dealing with media, communications and resource management. Response to a variety of man-made disasters (hazardous materials, fires, etc.) as well as natural disasters (weather, earthquake, etc.).

Prerequisite(s): FST 206 or FST 251

209 Fire Service Instructor 6 Cr. Hrs.

Development and delivery of fire service training materials. Instructional motivations, student learning strategies and evaluation are addressed. This course also meets the requirements of the State of Ohio certification as a State Fire Instructor as well as the objectives in National Fire Protection Association (NFPA) Standard 1041, Fire Service Instructor I. Five lecture, two lab hours per week.

Prerequisite(s): Five years experience as a firefighter and pass firefighter knowledge pre-test

210 Water Suppression System II**4 Cr. Hrs.**

Design installation and maintenance requirements for fixed water spray extinguishing systems including: standpipe systems, foam spray systems, sprinkler systems; use of hydraulic calculations, and appropriate national fire codes, with related Factory Mutual Loss Prevention Data manuals. Three lecture, two lab hours per week.

Prerequisite(s): FST 204

218 Plans Review for Fire Safety**3 Cr. Hrs.**

Role of a plans examiner and the part played in a fire protection environment; identification of code requirements; the analysis and abatement of building/fire code violations.

Prerequisite(s): ARC 107

220 Fire Protection Systems Design**4 Cr. Hrs.**

Design, installation and maintenance requirements for fire detection systems, chemical suppression systems, standpipe systems, foam systems, fire sprinkler systems; use of computer programs to perform hydraulic calculations and the use of appropriate national fire codes on sprinkler design. Three lecture, two lab hours per week.

Prerequisite(s): FST 116 or FST 204

251 Fire Officer Level I**8 Cr. Hrs.**

Management, supervision, and leadership within the basic fire department functional unit of the fire company. This course meets the objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Level I.

Prerequisite(s): FST 192

252 Fire Officer Level II**4 Cr. Hrs.**

Management, supervision and leadership needed to manage and command multi-company situations are examined. This course meets the objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications Level II.

Prerequisite(s): FST 251

253 Fire Officer Level III**4 Cr. Hrs.**

Administration of fire department operations and the management of facilities and resources needed to provide a public fire protection delivery system. This course meets the objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications, Fire Officer Level III.

Prerequisite(s): FST 252

254 Fire Officer Level IV**4 Cr. Hrs.**

Assesses the public fire protection needs of a community including the planning, development, and implementation of a public fire protection delivery system. This course meets the objectives of the National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Qualifications, Fire Officer Level IV.

Prerequisite(s): FST 253

270 Fire Science Technology Internship**R 1 - 12 Cr. Hrs.**

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

Prerequisite(s): Permission of chairperson

278 Fire Administration Capstone**4 Cr. Hrs.**

Master planning, decision making, and problem solving in the public fire protection environment. A capstone course for the Fire Science Technology, Fire Administrative Option.

Prerequisite(s): Permission of chairperson

Geography (GEO)

101 Physical Geography**4 Cr. Hrs.**

Analysis of the principle "spheres" of Earth: atmosphere, lithosphere, hydrosphere, and biosphere; an explanation of processes involved in shaping the Earth's physical environment; and current environmental issues such as global warming, ozone depletion, air and water pollution. Laboratory will include use of the Internet and various computer software. Three lecture, two lab hours per week.

102 Human Geography**3 Cr. Hrs.**

Introduction to aspects of geography concerned with the efforts of humans to cope with their environment: population and settlement forms; utilization of resources; spatial distribution of language and religion; the influence of political systems on culture; and the origin and dispersal of cultural elements among the various world realms.

145 Introduction to Meteorology**4 Cr. Hrs.**

Survey of major atmospheric elements such as temperature, pressure, moisture, and precipitation and the concepts of meteorology followed by weather analysis and forecasting. Through computer simulations, exploration and introduction to the formation and development of individual weather disturbances such as thunderstorms, tornadoes and hurricanes. Also included are impacts of human actions on the atmosphere. Laboratory exercises will combine the latest computerized software with in-class assignments. Three lecture and two lab hours per week.

146 Lab for GEO 145

Laboratory must be taken with GEO 145.

201 World Regional Geography I**3 Cr. Hrs.**

An introduction to world regional geography, focusing on the developed regions of the world based on their human and physical characteristics and their economic and political organizations.

202 World Regional Geography II**3 Cr. Hrs.**

An introduction to world regional geography, focusing on the developing regions of the world based on their human and physical characteristics and their economic and political organization.

204 Political Geography**3 Cr. Hrs.**

This course will introduce students to the field of political geography and focus on the spatial characteristics of political phenomena; emphasis includes the evolution of state, nation, and nation-state as well as the global economy, uneven development, and power politics.

Prerequisite(s): GEO 102 or instructor signature

297 Special Topics in Geography**R 1 - 6 Cr. Hrs.**

To provide opportunities to receive credit for non-traditional courses such as courses by TV and newspaper as well as special interest topics in the discipline; objectives will vary with the particular content area. Course is repeatable as topics change.

German (GER)

100 Conversational German**3 Cr. Hrs.**

Understanding and speaking in conversational settings, using knowledge of German-speaking cultures. May not be taken for credit if the student has completed GER 101 or any other first or second-year German course.

101 Elementary German I**4 Cr. Hrs.**

Foundation for understanding, speaking, reading and writing German. Language laboratory work may be required.

102 Elementary German II**4 Cr. Hrs.**

Foundation for understanding, speaking, reading and writing German. Language laboratory work may be required.

Prerequisite(s): GER 101

103 Elementary German III**4 Cr. Hrs.**

Foundation for understanding, speaking, reading and writing German. Language laboratory work may be required.

Prerequisite(s): GER 102

Geology (GLG)

141 General Geology I 4 Cr. Hrs.

Identification of rocks, minerals, their origin, destruction, recycling, surface processes of wind, water and ice in changing Earth's surface, plate tectonics; interior forces that cause earthquakes, volcanoes, mountain building. Three lecture, two lab hours (GLG 147) per week.

Co-requisite: GLG 147 (lab)

142 General Geology II 4 Cr. Hrs.

The Earth in space, physical evolution of oceans, atmosphere and continents, origin of life and its evolution, physical and biological development of North American continent. Three lecture, two lab hours (GLG 148) per week.

Prerequisite(s): GLG 141 and GLG 147

Co-requisite: GLG 148 (lab)

143 General Geology III 4 Cr. Hrs.

Use and misuse of resources, hazardous environments, engineering difficulties, waste disposal, pollution problems. Analysis of natural hazards; floods, volcanoes, earthquakes, mass wasting, subsidence, coastal threats and others. Consequences of human activities on the environment and on human populations; as well as mitigation and remediation strategies and processes. Three lecture, two lab (GLG 149) hours per week.

Prerequisite(s): GLG 141, GLG 147

Co-requisite: GLG 149 (lab)

144 Geological Field Trips 4 Cr. Hrs.

Hands-on experience during several Saturday, day-long field trips to different locations in Ohio. Field activities are meant to mimic what field geologists do and include, but are not limited to, direct observation, measurement and identification of minerals, rocks, fossils and features and the construction of stratigraphic columns. On-site study of rock formations, weathering characteristics, glaciation and natural resources. Use of observations to interpret and understand the processes involved in the building of the Appalachian Mountains and the geological development of Ohio. Three lecture, two lab hours per week.

Prerequisite(s): GLG 141, GLG 147 and GLG 142, GLG 148

147 Lab for GLG 141

Laboratory must be taken with GLG 141.

148 Lab for GLG 142

Laboratory must be taken with GLG 142.

149 Lab for GLG 143

Laboratory must be taken with GLG 143.

245 Concepts in Earth Science 5 Cr. Hrs.

Basic concepts and applications including properties of Earth materials, objects in the sky, and changes in the Earth and sky. Applications use an inquiry learning environment which emphasizes science process skills integrated with mathematics. Early and Middle Childhood Education majors only. Four lecture, three lab hours per week.

Prerequisite(s): ASE 145, MAT 110 or equivalent

270 Geology Internship

R 2 - 12 Cr. Hrs.

The internship is designed to support a variety of experiential learning needs. Adult learners with extensive learning from prior experience may receive acknowledgment of that learning with internship credit upon submission of a portfolio to an evaluation committee. Younger students with limited experience will participate in selected non-classroom experiences with relationship to their educational needs. Students already working full or part time may apply to use that experience in fulfillment of the internship requirement. For the latter two types of students, learning outcomes are established and related reports and/or projects are submitted each quarter.

297 Special Topics in Geology

R 1 - 6 Cr. Hrs.

To provide opportunities to receive credit for non-traditional courses such as courses by TV and newspaper as well as special interest topics in the discipline; objectives will vary with the particular content area. Course is repeatable as topics change.

Health Information Management (HIM)

110 Health Information Processing I

3 Cr. Hrs.

Foundations of health information management and health care data including health care systems, the Health Information Management profession, patient and health care data, and data collection methodologies. Two lecture, two lab hours per week.

Prerequisite(s): Permission of chairperson

111 Health Information Processing II

3 Cr. Hrs.

Health care data management, including organization of HIM functions, data quality, access, and retention. Discussion of classification systems, clinical vocabularies and nomenclatures. Two lecture, two lab hours per week.

Prerequisite(s): HIM 110 and approval of chairperson

116 Lab for HIM 110

Laboratory must be taken with HIM 110.

118 Lab for HIM 111

Laboratory must be taken with HIM 111.

121 Basic Medical Terminology

3 Cr. Hrs.

Basic prefixes, roots, and suffixes; disease terminology including anatomic, diagnostic, symptomatic, eponymic terms and standard abbreviations of the basic body systems.

Prerequisite(s): DEV 065 or equivalent

122 Specialized Medical Terminology

3 Cr. Hrs.

Continuation of HIM 121 for students in Health Information Management and in other health related programs requiring expanded working knowledge and understanding of the language of medicine.

Prerequisite(s): HIM 121

132 Basic Medical Transcription

3 Cr. Hrs.

Theory and application of equipment and skills required in order to transcribe dictated medical reports; exposure to common reference materials. Two lecture, three lab hours per week.

135 Medicolegal Aspects of Health Care Records

3 Cr. Hrs.

Evaluation of health care records as legal documents; special emphasis on policies and procedures concerning release of medical information and protecting patient confidentiality; principles and organization of the judicial system; health care fraud and abuse and HIPAA regulations.

Prerequisite(s): DEV 065 or equivalent

137 Lab for HIM 132

Laboratory must be taken with HIM 132.

178 HIM Intermediate Capstone

1 Cr. Hr.

Practical applications of competencies from the first-year HIM curriculum including projects, laboratory simulations and case studies. Completion of a mock credentialing examination required. Two lab hours per week.

Prerequisite(s): HIM 111 and HIM 135 and HIM 240 and HIM 245 and HIM 265 and ALH 142 and approval of chairperson

202 Medical-Surgical Transcription Lab Practice

3 Cr. Hrs.

Lab practice for HIM 132. Student transcribes English and foreign physician dictation in a simulated office environment.

Prerequisite(s): HIM 132

204 Health Informatics

2 Cr. Hrs.

An in-depth look at the use of information technology in the health care delivery system including: the roll, purpose and use of health information systems, the computer based patient record, various health information system applications, information systems life cycle and future technologies. Two lecture hours per week.

Prerequisite(s): HIM 111 and permission of chairperson

218 Cancer Registry 1 Cr. Hr.

Organization and operation of a hospital cancer registry under guidelines of the American College of Surgeons emphasizing case finding, accession, indexing, abstracting and follow-up of cancer data.

Prerequisite(s): HIM 111 and permission of chairperson

220 Health Information in Long Term Care 2 Cr. Hrs.

Purposes, uses, and handling of health information; departmental and facility administration; licensing and accreditation requirements as well as an introduction to payment systems in long term care. One lecture, two lab hours per week.

Prerequisite(s): Approval of chairperson

222 Coding & Billing in Long Term Care 3 Cr. Hrs.

The reimbursement system in Long Term Care facilities will be examined with specific emphasis on the ICD-9 and CPT Coding Process as well as the billing procedures used. Two lecture, two lab hours per week.

228 Clinical Abstracting 3 Cr. Hrs.

Introduction to clinical databases with emphasis on knowledge of abbreviations, laboratory tests, treatments, symptoms and drug therapies. Significant laboratory abstracting practice. Two lecture, two lab hours per week.

Prerequisite(s): ALH 142 and ALH 201 and HIM 111 and approval of chairperson

231 Inpatient ICD-9-CM Coding 5 Cr. Hrs.

Theory and application of skills necessary to assign ICD-9-CM diagnosis and procedure codes to inpatient cases for reimbursement and research. Additional time required outside of class for testing. Three lecture, four lab hours per week.

Prerequisite(s): HIM 265 and HIM 236 or HIM 262. Permission of chairperson

233 Lab for HIM 231
*Laboratory must be taken with HIM 231.***235 Health Record Statistics 3 Cr. Hrs.**

Theory and application of health care statistics; generating manual and computerized reports, graphically presenting data, securing and reporting vital statistics. Two lecture, two lab hours per week.

Prerequisite(s): HIM 111 and permission of chairperson

236 Ambulatory Coding for Hospitals 3 Cr. Hrs.

Theory and application of skills required to assign and sequence codes for hospital ambulatory services for reimbursement using the CPT and ICD-9-CM classification system. Additional time outside of class required for testing. Two lecture, two lab hours per week.

Prerequisite(s): HIM 265 and permission of chairperson

238 Lab for HIM 236

Laboratory must be taken with HIM 236.

240 Hospital Ambulatory Coding 4 Cr. Hrs.

Theory and application of skills required to assign and sequence codes for hospital ambulatory services for reimbursement using the CPT and ICD-9-CM classification system. Three lecture, two lab hours per week.

Prerequisite(s): BIO 162 and HIM 260 and HIM 261 and approval of chairperson

241 Hospital Inpatient Coding 4 Cr. Hrs.

Theory and application of skills necessary to assign ICD-9-CM diagnosis and procedure codes to inpatient cases for reimbursement and research. Two lecture, four lab hours per week.

Prerequisite(s): HIM 265 and HIM 240 and approval of chairperson

244 Health Care Quality Improvement 3 Cr. Hrs.

Organization and use of data in health care quality improvement programs including quality assessment and monitoring, case management, risk management and credentialing under current external regulatory guidelines and accreditation requirements. Two lecture, two lab hours per week.

Prerequisite(s): HIM 111 and BIS M45 and approval of chairperson

245 Health Information Resource Management 3 Cr. Hrs.

Planning, organizing, staffing, budgeting and analysis of management systems along with job standards and performance evaluations emphasizing development of supervisory management and leadership skills. Two lecture, two lab hours per week.

Prerequisite(s): HIM 111 and approval of chairperson

246 Health Care Information Systems 3 Cr. Hrs.

An in-depth look at the use of information systems technology in the health care delivery system. Includes electronic clinical information systems and health records, various health information system applications, information systems life cycle, and information security. Two lecture, two lab hours per week.

Prerequisite(s): HIM 110 and approval of chairperson

249 Health Care Statistics 2 Cr. Hrs.

Theory and application of health care statistics as related to data definitions and uses, mathematical review, statistical data collection, computation of statistical formulae and collection and reporting of vital statistics. One lecture, two lab hours per week.

Prerequisite(s): DEV 085 or equivalent

250 Supervised Professional Practice I 2 Cr. Hrs.

Practical application of health information management processes including filing, retrieval and qualitative and quantitative analysis of medical data as well as record completion by physicians and other allied health professionals. Four practicum hours per week.

Prerequisite(s): HIM 111 and approval of chairperson

251 Supervised Professional Practice II 3 Cr. Hrs.

Practical application of health information management processes including medicolegal release of medical information, patient registration, patient accounts, DRG coordination and assignment, ambulatory coding, flowcharting, generation of job procedures and optical disk scanning. Six practicum hours per week.

Prerequisite(s): HIM 250 and HIM 135 and HIM 236 or HIM 240 and approval of chairperson

252 Supervised Professional Practice III 4 Cr. Hrs.

Practical application and reinforcement of knowledge previously learned including statistical reporting, hospital-wide and HIM department quality assurance, utilization review, risk management and trauma, cardiac, burn and tumor registries. Eight practicum hours per week.

Prerequisite(s): HIM 231 or HIM 240 and approval of chairperson

258 Health Information Registries 2 Cr. Hrs.

Organization and operation of health care registries including cancer and trauma. Skill development emphasizing case finding, accession, indexing, abstracting and follow-up of data. One lecture, two lab hours per week.

Prerequisite(s): HIM 111 and approval of chairperson

260 ICD-9-CM Medical Office Coding 3 Cr. Hrs.

Introduction to principles and conventions for assigning ICD-9-CM codes to patient encounters for billing physician services. Students should possess proficiency in basic medical terminology. Additional out-of-class assignments required.

Prerequisite(s): HIM 121 or BIS 137

261 CPT Medical Office Coding 3 Cr. Hrs.

Introduction to rules, regulations and principles for assigning CPT codes to patient encounters for billing physician services. Students should possess proficiency in basic medical terminology. Additional out-of-class assignments required.

Prerequisite(s): HIM 121 or BIS 137

262 Advanced Medical Office Coding
4 Cr. Hrs.

Advanced theory and practice of ICD-9-CM and CPT coding for the medical office environment. Three lecture hours, two lab hours per week.

Prerequisite(s): HIM 122 and BIO 107 and HIM 260 and HIM 261

264 Hospital Coding Practicum
2 Cr. Hrs.

Advanced theory and practical experience coding ICD-9-CM and CPT for reimbursement in the hospital environment. Four lab hours per week.

Prerequisite(s): HIM 231 must be taken prior to or concurrently with HIM 264 and permission of chairperson

265 Health Care Data in Reimbursement
3 Cr. Hrs.

Organization of the health care delivery system including managed care and capitation. Theory and use of reimbursement systems such as DRGs, APC.s and RBRVS. Discussion of data flow from admission to billing and analysis of casemix. Two lecture, two lab hours per week.

Prerequisite(s): HIM 110 and HIM 260 and HIM 261 and approval of chairperson

278 HIM Capstone
3 Cr. Hrs.

Projects, oral and written presentations, case studies, and portfolio development incorporating the Domains, Subdomains and Tasks For Two Year HIM Programs from the American Health Information Management Association. Completion of two mock accreditation exams. Six lab hours per week.

Prerequisite(s): HIM 251 and approval of chairperson

297 Special Topics in Health Information Management
R 0.5 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses as well as special interest topics within the discipline.

History (HIS)**101 United States History (1607-1815)**
3 Cr. Hrs.

Development of the people of the United States in political, social, economic, and cultural areas.

102 United States History (1815-1919)
3 Cr. Hrs.

Development of the people of the United States in political, social, economic, and cultural areas.

103 United States History (1919-Present)
3 Cr. Hrs.

Development of the people of the United States in political, social, economic, and cultural areas.

105 African-American History
4 Cr. Hrs.

Contributions of African-Americans to the institutions and culture of the United States from 1619 to the present.

106 Civil Rights Era in the U.S.
3 Cr. Hrs.

Historical development of civil rights movement in U.S. with analysis of social, political, and economic impact.

111 Western Civilization (0-1300)
3 Cr. Hrs.

Major trends in the development of Western culture, emphasizing political, economic, social, and cultural achievements.

112 Western Civilization (1300-1815)
3 Cr. Hrs.

Major trends in the development of Western culture, emphasizing political, economic, social, and cultural achievements.

113 Western Civilization (1815-present)
3 Cr. Hrs.

Major trends in the development of Western culture, emphasizing political, economic, social, and cultural achievements.

140 The Civil War
3 Cr. Hrs.

Detailed coverage through use of original documents and photos tracing the political, economic and social causes, progression, and consequences of the American Civil War.

214 History of Southeast Asia
3 Cr. Hrs.

Survey of Indo-China, Indonesia, and the Philippines, with emphasis on economic, political, and religious evolution tracing ancient and colonial influences on modern nations of the area.

215 Survey of African History
3 Cr. Hrs.

Overview of the history of Africa from prehistoric times to the present from an Afrocentric perspective; special emphasis on twentieth century issues and problems.

216 Survey of Latin American History
3 Cr. Hrs.

Overview of Latin American history from prehistoric times to the present, tracing ancient and colonial influences on modern nations of the area.

217 Survey of East Asia
3 Cr. Hrs.

Survey of East Asia (China, Korea, and Japan) from earliest times to the present, with special emphasis on twentieth century issues and problems.

218 History of Ohio
3 Cr. Hrs.

Survey of the political, social, economic, and cultural development of the peoples of Ohio, from prehistoric times to the present. Ohio's role in the growth of the United States.

219 Survey of the Middle East
3 Cr. Hrs.

A survey of the Middle East concentrating on historical developments since the nineteenth century, tracing the development of Zionism, Arab, Turkish, Kurdish and Iranian nationalisms, the involvement of the superpowers and the U.N. and the resulting crises.

297 Special Topics: History
R 1 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (TV and newspaper) as well as special interest topics in the discipline.

Hospitality Management (HMT)**101 Dining/Kitchen Orientation**
2 Cr. Hrs.

Knowledge and skill development of dining room and commercial kitchen proficiency. Through lecture and demonstration modules, students will attain skills in these two environments. One lecture, two lab hours per week.

Prerequisite(s): DEV 065 and DEV 085 and DEV 110

102 Kitchen Chemistry
3 Cr. Hrs.

An introduction to the applied chemistry of food and food preparation. Lecture demonstrations and take home projects will be used to illustrate course principles.

Prerequisite(s): DEV 065 and DEV 085 and DEV 110 or DEV 101

105 Survey of the Food Industry
3 Cr. Hrs.

An overview of the food service industry, and the skills, abilities, and interest necessary for success in restaurant, hospital, school, nursing home, industry, and dormitory food service management. Field trips provide a general background of the organization's operation and management of food service organizations.

Prerequisite(s): DEV 065, DEV 085, DEV 110

107 Sanitation & Safety
3 Cr. Hrs.

Food sanitation topics including food spoilage, micro-organisms, food illnesses and outbreaks, and HACCP (Hazard Analysis Critical Control Point) controls, proper handling of equipment and personal hygiene.

Prerequisite(s): DEV 065, DEV 110 or equivalent

110 Menu Planning
2 Cr. Hrs.

Menu development and design to include facility design implications, equipment needs, efficiency in the kitchen and cost controls related to the hospitality industry.

Prerequisite(s): DEV 065 and DEV 085 and DEV 110

112 Basic Food Preparation 5 Cr. Hrs.

Understanding and practicing food preparation and culinary techniques, soups, sauces, vegetables, grains, farinaceous dishes and salad preparation; interpretation of menus and recipe conversion; maintaining a safe and sanitary kitchen. Two lecture, six lab (HMT 113) hours per week.

Prerequisite(s): HMT 107, DEV 085 and HMT 101 or DIT 137 or equivalent

113 Lab for HMT 112

Laboratory must be taken with HMT 112.

114 Advanced Food Preparation 5 Cr. Hrs.

Introduction to basic baking principles; production of meats, poultry, seafood and sandwiches as well as breakfast cookery methods. Two lecture, six lab (HMT 115) hours per week.

Prerequisite(s): HMT 112, HMT 113

115 Lab for HMT 114 R

Laboratory must be taken with HMT 114.

118 Artisan Breads I 5 Cr. Hrs.

Techniques for professional development and introduction to artisan yeast raised products. Two lecture, six lab hours per week.

Prerequisite(s): HMT 208 and HMT 238

125 Bar Operations Management 3 Cr. Hrs.

Various aspects of mixology, focusing on pouring techniques, drink recipes, computation of beverage costs, and beverage law. Hands-on experience in pouring using non-alcoholic beverages.

128 Cake Production & Decorating 5 Cr. Hrs.

Understanding of cake production methods, production of a variety of cakes, icings and decorating techniques in a commercial baking atmosphere culminating in an artistic display of a multi-tiered cake.

Prerequisite(s): HMT 114 and HMT 115

201 Food Service Equipment Design & Maintenance 3 Cr. Hrs.

Types of equipment used in the food service industry and maintenance performed. Layout of equipment in terms of efficiency and cost.

Prerequisite(s): HMT 105

206 Garde Manger 5 Cr. Hrs.

Preparation of force meats, sausages, pates, terrines, galantines, mousse, roulades, pate en croute, hors d'oeuvres and canapés as well as cold sauce production such as aspics and chaud froid sauces; development of skills necessary to produce a cold buffet utilizing vegetable carvings, ice carvings, platter layout, display and design. Two lecture, six lab hours per week.

Prerequisite(s): HMT 114, HMT 115

207 Butchery & Fish Management 3 Cr. Hrs.

Identifying grades, cutting of meat and fish; techniques for wholesale purchase and distribution as well as sanitary storage and practical management of a larder department. One lecture, four lab hours per week.

Prerequisite(s): HMT 114 and HMT 115

208 Pastry & Confectionery 5 Cr. Hrs.

Theory and practice of pastry and confectionery for the hotel and restaurant industry; dessert menu planning; orientation and familiarization with patisserie environment; all basic pastry preparation, presentation and application to classical dessert making. Two lecture, six lab (HMT 238) hours per week.

Prerequisite(s): HMT 114, HMT 115

209 Professional Cooking 5 Cr. Hrs.

Enhancement of chef skills by planning, coordinating and preparing of advanced professional menus; critical analysis of recipe preparation techniques and organizational skill abilities. Two lecture, six lab (HMT 239) hours per week.

Prerequisite(s): HMT 114, HMT 115, HMT 206, HMT 236, HMT 208, HMT 238

210 Hotel-Lodging Operations Management 3 Cr. Hrs.

Operational management in the lodging industry to include the use of the Property Management System functions and risk management.

Prerequisite(s): HMT 105 and approval of chairperson

211 Hospitality Industry Computer Systems 3 Cr. Hrs.

Information needs of lodging properties with food services; essential aspects of computer systems, such as hardware, software, and generic applications; computer based property management systems for both front and back office functions; hotel sales computer applications and yield management strategies; and computer based food and beverage management systems for both service oriented and management-oriented functions.

Prerequisite(s): HMT 105, BIS 160 or equivalent

212 Front Office Operations 3 Cr. Hrs.

A systematic approach to front office procedures by detailing the flow of business through a hotel, from the reservations process to check out and settlement. An examination of the various elements of effective front office management, with particular attention to the planning and evaluation of office operations and human resources management. Front office procedures and management are placed within the context of a lodging operation.

Prerequisite(s): HMT 105

215 Food & Labor Cost Controls 3 Cr. Hrs.

Basic methods used to control food, labor and operational costs in an average restaurant, bar and fast food operation. Financial statement analysis as a control, weekly usage sheets, inventories, control records, time card analysis, and sales slips.

Prerequisite(s): HMT 105 and ACC 112 or ACC 121

218 Advanced Confectionery & Pastries 5 Cr. Hrs.

Advanced pastry and confectionery techniques including laminated doughs, candy making, plating techniques and introduction to sugar work.

Prerequisite(s): HMT 114 and HMT 115

225 Organization & Administration of Hospitality Industry 3 Cr. Hrs.

This course is designed to provide students with the principles of supervision as they apply specifically to the hospitality industry.

Prerequisite(s): MAN 205, HMT 105

226 Purchasing for the Hospitality Industry 3 Cr. Hrs.

Procurement techniques and product information on food, furniture, fixtures and equipment, with emphasis on purchasing as a managerial function.

Prerequisite(s): HMT 105

227 Marketing in the Hospitality Industry 3 Cr. Hrs.

Organization of the marketing function in the hospitality industry; its role and responsibility in developing an integrated hospitality marketing program.

Prerequisite(s): MRK 201, HMT 105

228 Managing Bakery Production & Sales 5 Cr. Hrs.

Exploration of bakery management styles and models of organization; scheduling and employee guidelines; merchandising; baking for the future. Two lecture, six lab hours per week.

236 Lab for HMT 206 R

Laboratory must be taken with HMT 206.

237 Lab for HMT 207

This is a co-requisite laboratory course to be taken with HMT 207, Butchery & Fish Management. Includes hands-on learning associated with several varieties of meats and seafood; butchery and commercial kitchen considerations. Four lab hours per week.

Prerequisite(s): HMT 114 and HMT 115

238 Lab for HMT 208 R

Laboratory must be taken with HMT 208.

239 Lab for HMT 209 R

Laboratory must be taken with HMT 209.

270 Food Service Management Internship R 1 - 9 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

291 Food Service Internship I R 3 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

292 Food Service Internship II R 3 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

293 Food Service Internship III R 3 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

295 Food Service Management Seminar 3 Cr. Hrs.

Gives graduating students an overall review and update of the courses taken in Hospitality Management. Prepares the student seeking employment with application procedures and job interviews.
Prerequisite(s): HMT 215, HMT 225 and MAN 205

297 Special Topics in Hospitality Industry R 1 - 5 Cr. Hrs.

Topics within the Hospitality or Culinary Arts programs not covered within existing courses; opportunities for non-traditional learning and continuing professional development in these areas.

Humanities (HUM)**115 International Environment: Culture & Business** 3 Cr. Hrs.

An exploration of social, political, cultural, and business conditions in the international arena and of social and business practices in various environments. Also offered as MAR 115; students may enroll in either course but not both.

125 The Human Image 3 Cr. Hrs.

Explores the nature and content of the humanities by examining and comparing our culture with various cultures from the past.

130 Humanity & the Challenge of Technology 3 Cr. Hrs.

Opportunities and dangers faced by human kind in the evolution of new technologies through examining several instances of contemporary technological development.

131 The Search for Utopia 3 Cr. Hrs.

A survey of humanity's creative search for the ideal society with special emphasis on important concepts/beliefs that have changed the world.

132 Connecting Technology & Our Lives 3 Cr. Hrs.

History, underlying concepts and effects on community values and quality of life resulting from technological development in Dayton; impact on students and their families; personal and community planning for future changes.

135 Environmental Ethics 3 Cr. Hrs.

Overview of philosophical and ethical dimensions of the environmental crisis, such as environmental politics, animal rights, non-western views. Available for Honors credit.

140 Appalachian Folkways 3 Cr. Hrs.

Overview of the facets of folkways and folklore in the Appalachian region of the United States, including folk customs, material culture, performing folk arts, and oral literature.

141 Appalachia 3 Cr. Hrs.

An examination of various facets of life in Appalachia, including history, culture, economics, politics, education, and religion.

194 World & Community Issues 3 Cr. Hrs.

A discussion and study forum focused on broad humanities themes related to the Phi Theta Kappa study topics for the year in which the course is offered. Students select a research project or take on the task of recruiting a speaker; viewing and discussing the satellite seminar programs and community speakers; evaluating and critiquing each other's projects in class; contributing to class discussions; and making a project presentation at the end of the course.

195 Patterns of Leadership R 3 Cr. Hrs.

Examine and analyze leadership in its various dimensions; study and evaluate leaders in several elements and fields.

204 Religion in Appalachia 3 Cr. Hrs.

The role of Appalachian Mountain religion in rural and urban Appalachia and the intertwining of the Appalachian culture and religion. Also focuses on a variety of distinctive Appalachian regional religious traditions.

205 Cultures of Ancient Greece & Rome 3 Cr. Hrs.

Rise and fall of these cultures; their contributions to Western culture.

236 International Studies 6 Cr. Hrs.

Under the supervision of Sinclair faculty, visit another country, study activities related to specific academic majors.

245 The Vietnam War: Narratives & Issues 3 Cr. Hrs.

History of American military involvement in Vietnam, emphasizing narratives written by those involved in both the war and the anti-war movement.

255 People & Religion 3 Cr. Hrs.

Interdisciplinary investigation of the religious influences in the life of the individual and in society.

297 Special Topics: Humanities R 1 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses such as courses by TV and newspaper as well as special interest topics in the discipline.

Heating, Ventilating, Air Conditioning & Refrigeration Engineering Technology (HVA)**101 ABC Level 1-A Core Curriculum** 3.5 Cr. Hrs.

Core curriculum in the ABC apprenticeship program, including safety, basic math, hand and power tools, blueprint reading and rigging. One and one-half lecture, four lab hours per week.

Prerequisite(s): Approval of chairperson

102 HVAC Level 1-B ABC 3.5 Cr. Hrs.

Beginning HVAC courses for participants in the ABC apprenticeship program. Includes introduction to HVAC, piping practices, basic electricity, and introductions to cooling and heating. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 101 and approval of chairperson

- 103 HVAC Level 2-A ABC 3.5 Cr. Hrs.**
Air distribution systems, furnaces, mechanical maintenance, electricity and electronics, and HVAC controls. One and one-half lecture, four lab hours per week.
Prerequisite(s): HVA 102 and approval of chairperson
- 104 HVAC Level 2-B ABC 3.5 Cr. Hrs.**
Fundamentals of heat pumps, compressors, metering devices and refrigerant management. One and one-half lecture, four lab hours per week.
Prerequisite(s): HVA 103 and approval of chairperson
- 112 Sheetmetal Level 1-B ABC 3.5 Cr. Hrs.**
Basic sheetmetal topics, including fasteners, hangers, supports, insulation, installation of accessories, and basic fabrication. One and one-half lecture, four lab hours per week.
Prerequisite(s): HVA 101 and approval of chairperson
- 113 Sheetmetal Level 2-A ABC 3.5 Cr. Hrs.**
Trade math, basic piping practices and fabrication using radial lines. One and one-half lecture, four lab hours per week.
Prerequisite(s): HVA 112 and approval of chairperson
- 114 Sheetmetal Level 2-B ABC 3.5 Cr. Hrs.**
Blueprints and specifications, air properties and distribution, sheet metal duct fabrication standards, soldering and fabrication of fiberglass ductwork. One and one-half lecture, four lab hours per week.
Prerequisite(s): HVA 113 and approval of chairperson
- 122 Plumbing Level 1-B ABC 3.5 Cr. Hrs.**
The plumbing profession, plumbing safety, piping, fittings, fixtures, plumbing drawings and plumbing math. One and one-half lecture, four lab hours per week.
Prerequisite(s): HVA 101 and approval of chairperson
- 124 Plumbing Level 2-B ABC 3.5 Cr. Hrs.**
Installing, testing and servicing water supply piping, fixtures, valves, faucets, water heaters and fuel gas systems. One and one-half lecture, four lab hours per week.
Prerequisite(s): HVA 123 and approval of chairperson
- 140 HVAC Installation Techniques 3 Cr. Hrs.**
Basic practices required for new installation and replacement of HVAC equipment including an introduction to sheet metal skills, copper and black pipe plumbing, and power connections. Hands-on skills and code requirements will be stressed along with good safety practices. Two lecture, two lab hours per week.
Prerequisite(s): DEV 085

- 144 Introduction to HVAC Systems 3 Cr. Hrs.**
Basic concepts and theory of heating, ventilating, air conditioning and refrigeration systems, including basic use of required instruments to measure temperature, humidity, airflow and refrigerant pressures. Two lecture, two lab hours per week.
Prerequisite(s): DEV 108 or INT 141
- 160 Basics of Heating & Heating Systems 3 Cr. Hrs.**
Introduction to the basic concepts of all heating systems found in light commercial applications for the experienced and inexperienced in HVAC. A comprehensive presentation of HVAC systems, including rooftop packaged systems, packaged low pressure boiler systems, and packaged unitary heaters. Innovations in high efficiency energy conservation and zone control will be discussed. Two lecture, two lab hours per week.
Prerequisite(s): MET 106 or HVA 144
- 162 HVAC Loads & Distribution for Small Buildings 3 Cr. Hrs.**
A discussion and demonstration of the importance of proper distribution systems, both air and water; principles of balanced heat distribution including design considerations for light commercial applications. Loads will be calculated with constant temperature and climate control conditions as the goal. Two lecture, two lab hours per week.
Prerequisite(s): DEV 108 or INT 141
- 170 Air & Water Distribution Systems 5 Cr. Hrs.**
Theory and practice of fluid flow in HVAC distribution systems, including water system design and analysis, duct design and analysis, fan and pump selection, valve and damper selection, and evaluation of overall air and water system performance. Hand calculations and use of computer based design and analysis tools; selected hands-on laboratory studies reinforce basic principles; proper installation practices are also included. Three lecture, four lab hours per week.
Prerequisite(s): MET 106 or HVA 144 and MET 198 or ETD 198 and MAT 101
- 174 Building Psychrometrics & Load Calculations 5 Cr. Hrs.**
Theory and practice of performing psychrometric analysis of HVAC systems. Principles and practice performing detailed heating and cooling load calculations for commercial facilities. Students learn both hand calculations and use of computer based design and analysis tools. Selected hands-on laboratory studies reinforce basic principles. Three lecture, four lab hours per week.
Prerequisite(s): MET 106 or HVA 144 and MET 198 or ETD 198 and MAT 101

- 177 Testing, Adjusting & Balancing in HVAC Systems 3 Cr. Hrs.**
Theory and practice of testing, adjusting and balancing (TAB) air and water in HVAC systems. Includes practices procedures, data collection and report preparation as may be required by a client. Course will include hands-on balancing using current state-of-the-art equipment. Two lecture, two lab hours per week.
Prerequisite(s): MET 106 or HVA 144 and MET 120 or HVA 162 or MET 125 or MET 126 or HVA 170
- 180 Boilers in HVAC Systems 3 Cr. Hrs.**
A reference course for experienced and inexperienced HVAC professionals. A comprehensive study of low pressure and high pressure hot water/steam generation, including the fundamentals of heat generation in water-based heating systems and gas-fired radiant heating systems. Two lecture, two lab hours per week.
Prerequisite(s): MET 106 or HVA 144
- 184 Basics of Cooling & Cooling Systems 3 Cr. Hrs.**
Foundations in the applications of cooling principles in light commercial equipment. Designed for those with hands-on HVAC responsibilities or the desire to gain a deeper understanding of the principles behind the refrigeration cycle. Major components include refrigerant flow through equipment, applications of equipment to the refrigeration cycle, heat transfer fundamentals and preparation for the EPA refrigerant handler's certification exam. Two lecture, two lab hours per week.
Prerequisite(s): HVA 144 or MET 106
- 186 Modern Refrigeration Practice 3 Cr. Hrs.**
Theoretical and practical basis for design and application of refrigeration systems, including cycle analysis and equipment sizing. Two lecture, two lab hours per week.
Prerequisite(s): MAT 101 and MET 130 or HVA 184
- 190 HVAC Mechanical Troubleshooting 3 Cr. Hrs.**
Diagnostic methods of mechanical problem solving in heating and cooling systems; and procedures for proper component replacement. Other topics include common faults and how to avoid repair failures. Two lecture, two lab hours per week.
Prerequisite(s): MET 111 or HVA 160 and MET 130 or HVA 184

194 HVAC Electrical Troubleshooting 3 Cr. Hrs.

This course will take the student into some of the more complex problems the experienced technician and advanced student will encounter. This course is comprehensive in nature, and will cover advanced electrical control problems. Two lecture, two lab hours per week.

Prerequisite(s): EET 119 and MET 111 or HVA 160 and MET 130 or HVA 184

201 HVAC Level 3-A ABC 3.5 Cr. Hrs.

Basics of preventive and planned maintenance, electrical and electronic troubleshooting, and troubleshooting heating systems. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 104 and approval of chairperson

202 HVAC Level 3-B ABC 3.5 Cr. Hrs.

Troubleshooting of cooling systems, heat pumps and accessories; commercial heating and cooling systems, air and water balance, steam systems and customer relations. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 201 and approval of chairperson

203 HVAC Level 4-A ABC 3.5 Cr. Hrs.

Advanced blueprint reading, indoor air quality, energy conservation equipment, energy management systems and water treatment for HVAC systems. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 202 and approval of chairperson

204 HVAC Level 4-B ABC 3.5 Cr. Hrs.

Start-up and shutdown of HVAC systems, heating and cooling system design, and commercial and industrial refrigeration. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 203 and approval of chairperson

211 Sheetmetal 3-A ABC 3.5 Cr. Hrs.

Field measuring and fittings, air systems, welding, brazing, cutting, refrigeration and airflow principles. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 114 and approval of chairperson

212 Sheetmetal Level 3-B ABC 3.5 Cr. Hrs.

Comprehensive blueprint and specification reading, fabrication by triangulation, and architectural sheet metal. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 211 and approval of chairperson

213 Sheetmetal Level 4-A ABC 3.5 Cr. Hrs.

Sheetmetal shop production and organization, air balance, louvers, dampers and access doors. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 212 and approval of chairperson

214 Sheetmetal Level 4-B ABC 3.5 Cr. Hrs.

Fume and exhaust system design, review of fabrication techniques, and introductory skills for the crew leader. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 213 and approval of chairperson

221 Plumbing Level 3-A ABC 3.5 Cr. Hrs.

Sizing water supply piping, potable water supply treatment and backflow preventers. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 124 and approval of chairperson

222 Plumbing Level 3-B ABC 3.5 Cr. Hrs.

Types of venting, sizing DWV and storm systems, sewage and sump pumps, corrosive-resistant waste pipe and compressed air systems. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 221 and approval of chairperson

223 Plumbing Level 4-A ABC 3.5 Cr. Hrs.

Sizing DWV and storm systems, private water supply systems, private waste disposal systems, locating buried water and sewer lines, and hydronic and solar heating systems. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 222 and approval of chairperson

224 Plumbing Level 4-B ABC 3.5 Cr. Hrs.

Water supply treatment, swimming pools and hot tubs, compressed air, corrosive-resistant waste piping, and plumbing for mobile homes and mobile home parks. One and one-half lecture, four lab hours per week.

Prerequisite(s): HVA 223 and approval of chairperson

231 Stationary Engineering 4 Cr. Hrs.

Fundamentals of stationary engineering, including hydronic and steam boilers, burners, fuels, combustion, pumps and specialties. Three lecture, two lab hours per week.

Prerequisite(s): Approval of Chairperson

232 Electricity & Refrigerants 4 Cr. Hrs.

Review of electrical principles as applied to HVAC systems, use of meters and schematics for electrical troubleshooting, current refrigerants and refrigerant oils, and refrigerant pipe sizing. Three lecture, two lab hours per week.

Prerequisite(s): Approval of Chairperson

233 Compressors 4 Cr. Hrs.

Fundamentals of reciprocating, rotary, centrifugal, scroll and screw compressors and accessories. Three lecture, two lab hours per week.

Prerequisite(s): Approval of Chairperson

234 Chillers 4 Cr. Hrs.

Application of reciprocating and centrifugal chillers to HVAC systems; includes chiller specialties, cooling towers and water conditioning. Three lecture, two lab hours per week.

Prerequisite(s): Approval of Chairperson

235 Testing, Adjusting & Balancing P/P 4 Cr. Hrs.

Principles of air and water balance, including how to properly balance air handling units, fans ducts and water systems. Three lecture, two lab hours per week.

Prerequisite(s): Approval of Chairperson

236 Heating & Cooling Controls 4 Cr. Hrs.

Controls for HVAC systems, including heating and cooling controls as well as pneumatic and DDC systems. Three lecture, two lab hours per week.

Prerequisite(s): Approval of Chairperson

240 Principles of Process Control 3 Cr. Hrs.

Basic theory and application of measurement, instrumentation, and control as applied to engineering processes including HVAC. Course will cover pneumatic and electronic instrumentation and control systems with an emphasis on control loop performance and tuning. Two lecture, two lab hours per week.

Prerequisite(s): EET 119 and MET 198 or ETD 198 and MET 205 or HVA 286 or MET 125 or MET 126 or HVA 170

243 Controls for Building HVAC Systems 3 Cr. Hrs.

Theory and design practice of control systems in use in the heating and air conditioning of commercial and industrial applications. Two lecture, two lab hours per week.

Prerequisite(s): MET 228 or HVA 240 and MET 145 or MET 146 or HVA 174

250 Industrial Process Exhaust 3 Cr. Hrs.

The design and operation of ventilation systems for laboratory, kitchen and industrial process exhaust. Two lecture, two lab hours per week.

Prerequisite(s): MET 125 or MET 126 or HVA 170

253 Advanced HVAC Applications**3 Cr. Hrs.**

Theory and techniques for design of heating, ventilation, and air conditioning systems for modern commercial and industrial buildings. Two lecture, two lab hours per week.

Prerequisite(s): MET 125 or MET 126 or HVA 170 and MET 145 or MET 146 or HVA 174

254 Advanced HVAC Applications II**3 Cr. Hrs.**

This continuation of MET 253 (Advanced HVAC Applications) introduces additional advanced topics in HVAC design, operation and troubleshooting including noise, vibration, acoustics, water treatment, energy recovery systems, energy modeling, energy economics, and design of HVAC systems to meet requirements of national energy codes. Two lecture, two lab hours per week.

Prerequisite(s): MET 240 or HVA 253

270 HVACR Engineering Technology Internship**R 1 - 12 Cr. Hrs.**

Preparing a portfolio based on work related/on-the-job experience.

Prerequisite(s): Approval of chairperson

272 Mechanical Cost Estimating**3 Cr. Hrs.**

Estimating of materials, labor and equipment costs for HVACR systems. Focuses on different estimating techniques for doing various types of estimates, including budget estimates and detailed estimates for bid packages with a special emphasis on methods of estimating piping and ducting systems. Two lecture, two lab hours per week.

Prerequisite(s): ARC 139 and MET 106 or HVA 144

276 Current Topics in Heating, Ventilating & Air Conditioning**3 Cr. Hrs.**

Identification and analysis of current issues in HVAC design, installation, operation or troubleshooting. Topics reflect relevant concerns and issues in the field. Two lecture, two lab hours per week.

Prerequisite(s): MET 240 or HVA 253 or equivalent professional experience

278 HVACR Applications Capstone Project**6 Cr. Hrs.**

Application of design techniques including computer software to design of HVAC system for representative model building. Four lecture, four lab hours per week.

Prerequisite(s): MET 229 or HVA 243 and MET 242 or HVA 254

286 Fluid Mechanics**3 Cr. Hrs.**

Essentials of fluid properties, fluid statics, fluids in motion, flow measurements, and losses through flow in pipes. Two lecture, two lab hours per week.

Prerequisite(s): MAT 133 and MET 203 or ETD 202 or ETD 203

288 Thermodynamics**4 Cr. Hrs.**

The laws and application of the principles of thermodynamics as they apply to internal combustion engines, steam cycles, and refrigeration.

Prerequisite(s): MET 205 and HVA 286

297 Special Topics in HVACR**Technology R 1 - 6 Cr. Hrs.**

This course allows a student or group of students to study a topic of interest to the student(s) as approved by the instructors.

Prerequisite(s): Approval of chairperson

Industrial Engineering Technology (IET)**101 Work Methods Analysis & Improvement****3 Cr. Hrs.**

Introduction to the purpose and need for work methods analysis technique, human resistance to change, methods to justify and implement new production methods.

111 Work Measurement Techniques**4 Cr. Hrs.**

The application of the fundamentals of work measurement techniques, including taking time studies, calculating standard times, estimating product costs, developing standard data, performing Methods Time Measurements (MTM) standards, work sampling standards, and learning curve analysis. Three lecture, two lab hours per week.

Prerequisite(s): IET 101

112 Industrial Ergonomics**3 Cr. Hrs.**

Introduction to the application of ergonomic design principles in the industrial environment, including ergonomic planning and implementation for a variety of work environments, repetitive strain injuries, National Institute of Occupational Safety and Health (NIOSH) work standards, and the impact of these factors on work station and equipment design. Two lecture, two lab hours per week.

Prerequisite(s): ENG 111 or ENG 121

115 Survey of Production Control**2 Cr. Hrs.**

Basic concepts of production and inventory control of an industrial organization with the introduction of Enterprise Resource Planning (ERP) and supply chain management.

125 Introduction to World-Class Manufacturing**3 Cr. Hrs.**

An overview of world-class manufacturing principles, illustrating the many inter related functions within successful companies including market research, conceptual design, detailed design, production planning, manufacturing, sales and customer support. Additional focus on current trends in manufacturing.

126 Supervision & Work Teams Leadership**3 Cr. Hrs.**

Introduction to the fundamental techniques of industrial supervision and team leadership, including supervision functions, work teams leadership functions, leadership styles, employee motivation, and supervision of union personnel.

130 Lean Manufacturing**3 Cr. Hrs.**

Lean Manufacturing principles including lead time reduction, containerization, module design, Kanban, and management by eye. Two lecture, two lab hours per week.

Prerequisite(s): IET 101

135 Manufacturing Cost Analysis**3 Cr. Hrs.**

Industrial cost analysis and control for manufacturing operations to include standard, overhead, and other types of costs; budget breakeven points; cost-volume-profit relationships, cost estimating, and Activity Based Costing (ABC).

Prerequisite(s): IET 198 and MAT 131 or equivalent

161 IET Tech Prep Seminar I**1 Cr. Hr.**

An overview of the unique skills and education needed by Industrial, Manufacturing, and Plastics and Composites Engineering Technology Tech Prep students. Students will also set career goals and develop a vision for their early career progress.

Prerequisite(s): Permission of the instructor

162 IET Tech Prep Seminar II**1 Cr. Hr.**

Industry site tours and classroom contact with practicing industrial and manufacturing engineers.

Prerequisite(s): IET 161

163 IET Tech Prep Seminar III**1 Cr. Hr.**

An overview of Industrial, Manufacturing, and Plastics and Composites Engineering Technology career development opportunities available after the associate degree.

Prerequisite(s): IET 162

190 Industrial Engineering Technology Workshop**R 0 - 3 Cr. Hrs.**

Various topics related to Industrial Engineering Technology.

198 Computer Quantitative Analysis in Engineering Technology**2 Cr. Hrs.**

Application of computer tools to analyze and solve engineering technology problems; emphasizing the advanced use of spreadsheets, including programming with macros. One lecture, two lab hours per week.

205 Manufacturing Processes**3 Cr. Hrs.**

Survey of modern manufacturing processes including casting, molding, shearing, forming, machining, joining, and finishing for metallic and non-metallic materials. Special emphasis on equipment, tooling, capabilities and process planning.

Prerequisite(s): IET 101

206 Value Engineering 3 Cr. Hrs.

An introduction to the purpose and need of Value Engineering Techniques in order to reduce the cost of the product while maintaining the quality and functional requirements of product.

Prerequisite(s): IET 205 or permission of instructor

207 Manufacturing System Analysis 3 Cr. Hrs.

Manufacturing simulation to solve manufacturing problems. Involves actual programming of manufacturing models consisting of labor, material, and equipment to predict future outcome of different alternatives. Two lecture, two lab hours per week.

Prerequisite(s): IET 205

208 Engineering Technology Economics 3 Cr. Hrs.

Basic economic concepts, decisions, analysis and evaluations as applied to engineering design, production, maintenance and quality control.

Prerequisite(s): ETD 198 and MAT 131

216 Industrial Facilities Layout 4 Cr. Hrs.

Study of actual manufacturing plant layouts, symbols, nomenclature and their interpretations. Specific requirements and conditions are given as a lab project to solve a manufacturing facilities layout problem. Two lecture, four lab hours per week.

Prerequisite(s): IET 205 or permission of instructor

235 Operations Management 4 Cr. Hrs.

Study and applications of operations management principles. The student will coordinate with and implement process planning to optimize production and the use of materials.

Prerequisite(s): MAT 131 or equivalent

240 Six Sigma I 4 Cr. Hrs.

An applied introduction to Six Sigma using problem solving tools, concepts, and methodology to improve customer satisfaction. Includes application of Green Belt based tools to reduce costs and improve business processes with utility in any type of business. It is recommended, not required, that the student have a part time or full time job in order to apply Six Sigma concepts.

270 Industrial Engineering Technology Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work co-op or internship work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

277 Industrial Engineering Technology Tech Prep Project 3 Cr. Hrs.

Application of Industrial Engineering Technology (IET) and manufacturing principles, using student teams for real or laboratory simulations of manufacturing processes. Two lecture, two lab hours per week.

Prerequisite(s): IET 162

278 Manufacturing Capstone 3 Cr. Hrs.

Assessment of achievement by Industrial Engineering Technology students in attaining manufacturing related outcomes by completing a project demonstrating principles and practices of the major. One lecture, four lab hours per week.

Prerequisite(s): Permission of instructor

297 Industrial Engineering Technology Special Topics R 0 - 8 Cr. Hrs.

New developments in Industrial Engineering and Manufacturing Technology and their impact on manufacturing operations, competitiveness and productivity.

Prerequisite(s): Permission of the instructor

Integrative Massage Therapy (IMT)

101 Integrative Medical Massage Therapy I 3 Cr. Hrs.

History of medical massage, the therapeutic environment and relationship, professional ethics; applied anatomy of integumentary system and superficial fascia; introduction to Swedish massage. Two lecture, two lab hours per week.

Prerequisite(s): BIO 107 and restricted to majors

102 Lab for IMT 101

Laboratory must be taken with IMT 101.

103 Integrative Medical Massage Therapy II 5 Cr. Hrs.

Taking medical history, documentation; ethics and boundaries in therapeutic relationship; Swedish Massage techniques continued; introduction to musculoskeletal disorders. Two lecture, six lab hours per week.

Prerequisite(s): IMT 101 and restricted to majors

104 Lab for IMT 103

Laboratory must be taken with IMT 103.

105 Personal Assessment for Massage Therapists 2 Cr. Hrs.

Personal Assessment will facilitate students in understanding a variety of styles for communicating with others in a therapeutic relationship.

Prerequisite(s): BIO 107 and restricted to majors

106 Business Ethics for the Massage Therapist 1 Cr. Hr.

Application of a professional code of ethics to practical clinical behavior.

Prerequisite(s): BIO 107 and restricted to majors

107 Anatomy & Physiology for the Massage Therapist I 5 Cr. Hrs.

Introduction to the human body including chemical, cellular and tissue organization, integumentary system and appendicular and axial skeletons with application in massage therapy. Two lecture, six lab hours per week.

Prerequisite(s): BIO 107 and restricted to majors

108 Lab for IMT 107

Laboratory must be taken with IMT 107.

151 Introduction to Holistic Therapies 1 Cr. Hr.

Exploration and development of a holistic approach to therapeutic interventions.

Prerequisite(s): BIO 107 and restricted to majors

152 Pain Management for Massage Therapists 2 Cr. Hrs.

Pathology of pain; traditional and complementary medical and holistic approaches to pain management, including use of passive modalities.

Prerequisite(s): IMT 101 and restricted to majors

205 Integrative Medical Massage Therapy III 5 Cr. Hrs.

Introduction to soft tissue barriers and their clinical significance; Muscle Energy Techniques, Swedish Massage continued; palpatory and assessment skills, pathology of joints, professional ethics, and communication in therapeutic relationship. Two lecture, six lab hours per week.

Prerequisite(s): IMT 103 and IMT 107 and restricted to majors

206 Lab for IMT 205

Laboratory must be taken with IMT 205.

207 Integrated Medical Massage IV 5 Cr. Hrs.

Introduction to craniosacral therapy; pain physiology and assessment; myoneural therapy; Swedish massage continued; applied anatomy of neuromuscular and musculoskeletal systems. Two lecture, six lab (IMT 217) hours per week.

Prerequisite(s): IMT 205 and IMT 210 and restricted to majors

208 Integrative Medical Massage Therapy V 5 Cr. Hrs.

Identification, assessment and treatment of neuro-musculoskeletal disorders; clinical supervision. Two lecture, six lab hours per week.

Prerequisite(s): IMT 207 and IMT 212 and restricted to majors

209 Lab for IMT 208

Laboratory must be taken with IMT 208.

210 Anatomy & Physiology for the Massage Therapist II 5 Cr. Hrs.

Introduction to the human body including articulations, muscle tissue, muscles, nervous tissue, spinal cord and spinal nerves with application in massage therapy. Two lecture, six lab hours per week.
Prerequisite(s): IMT 103 and IMT 107 and restricted to majors

211 Lab for IMT 210
Laboratory must be taken with IMT 210.

212 Anatomy & Physiology for the Massage Therapist III 5 Cr. Hrs.

Introduction to the human body including brain, sensory, motor, and integrative systems; special senses, autonomic nervous system, endocrine system, blood, heart, and blood vessels with application in massage therapy. Two lecture, six lab (IMT 213) hours per week.
Prerequisite(s): IMT 205 and IMT 210 and restricted to majors

213 Lab for IMT 212
Laboratory must be taken with IMT 212.

214 Anatomy & Physiology for the Massage Therapist IV 5 Cr. Hrs.

Introduction to the human body including lymphatic, respiratory, digestive, urinary, reproductive systems; advanced course work in skeletal and muscle systems with application in massage therapy. Two lecture, six lab hours per week.
Prerequisite(s): IMT 207 and IMT 212 and restricted to majors

215 Lab for IMT 214
Laboratory must be taken with IMT 214.

216 Business Practices for the Massage Therapist I 3 Cr. Hrs.

Introduction to "TouchPro" method of seated massage including application of technique and marketing. One lecture, four lab hours per week.
Prerequisite(s): IMT 205 and IMT 210 and restricted to majors

217 Lab for IMT 207
Laboratory must be taken with IMT 207.

218 Massage Therapy Practicum 2 Cr. Hrs.

Introductory experience in the clinical setting, application of theories and techniques for client intervention, assessment and medical record keeping, and referral to other health care providers. One lecture, seven practicum hours per week.
Prerequisite(s): IMT 207 and IMT 212 and restricted to majors

220 Anatomy & Physiology Seminar 3 Cr. Hrs.

A comprehensive review and application of anatomy and physiology principles for massage therapists.
Prerequisite(s): IMT 214 and restricted to majors

221 Massage Therapy Seminar 3 Cr. Hrs.

Comprehensive review of massage therapy theory and practice for the massage therapist.
Prerequisite(s): IMT 214 and IMT 218 and restricted to majors

223 Business Practices for the Massage Therapist II 2 Cr. Hrs.

Development of a business plan for planning, marketing and maintaining a massage therapy practice.
Prerequisite(s): IMT 216 and restricted to majors

226 Lab for IMT 216
Laboratory must be taken with IMT 216.

228 Lab for IMT 218
Laboratory must be taken with IMT 218.

Interior Design (IND)

131 Interior Design I 3 Cr. Hrs.

Design foundations exploring profession, principles, elements, and processes; space planning and furniture arrangement fundamentals with emphasis on design drawings and professional presentation form. Two lecture, four lab hours per week.

132 Interior Design II 3 Cr. Hrs.

Data gathering, problem solving, psychological parameters of planning and selection of materials and furnishings; continuation of design, drawings, and processes. Two lecture, four lab hours per week.
Prerequisite(s): IND 131

133 Interior Design III 3 Cr. Hrs.

Historical evolution of architectural design examining the extended environment, building systems and exterior styles, electrical and wiring plans; continuation of design drawings and processes. Two lecture, four lab hours per week.
Prerequisite(s): IND 132 and ARC 101

134 Interior Textiles & Materials 3 Cr. Hrs.

Overview of specifications, relative costs and performance properties of materials used in interior design. Includes textiles.
Prerequisite(s): IND 131

231 Advanced Interior Design I 4 Cr. Hrs.

Advanced issues in barrier-free/universal design. Study and application of construction types. Two lecture, four lab hours per week.
Prerequisite(s): IND 133 and ARC 102

232 Advanced Interior Design II 4 Cr. Hrs.

Advanced issues in kitchen design and anthropometrics. Study and application of building systems. Advanced oral and visual presentation skills. Two lecture, four lab hours per week.
Prerequisite(s): IND 231

233 Advanced Interior Design III 3 Cr. Hrs.

Introduction to interior design business practices, including cost estimating, contract writing, sales and communication techniques.
Prerequisite(s): IND 232

240 History of Furniture 3 Cr. Hrs.

Examination of the stylistic development of domestic furniture and furnishings from classical times to the present.
Prerequisite(s): IND 133

Tooling & Machining Technology (INT)

109 Fundamentals of Tool & Manufacturing Processes 4 Cr. Hrs.

Nomenclature, functions and capabilities of the machine shop and manufacturing processes. Three lecture, two lab hours per week.

111 Tool & Manufacturing Processes I 3 Cr. Hrs.

An overview of, steel making, heat treatment, safety and measurement equipment emphasizing tool and manufacturing processes through machine tool projects and development of process charts. This course emphasizes the use of the engine lathe. Two lecture, two lab hours per week.

112 Tool & Manufacturing Processes II 3 Cr. Hrs.

Knowledge of machine tool operations extended by utilizing various types of milling machines, drill presses, lathes and electrical discharge machining (EDM). Two lecture, two lab hours per week.
Prerequisite(s): INT 111

113 Fundamentals of CNC 3 Cr. Hrs.

Development of computer numerical control (CNC) programs for actual operations on the three-axis CNC equipment. Two lecture, two lab hours per week.
Prerequisite(s): INT 109 or INT 112

114 Jig & Fixture Design 3 Cr. Hrs.

Theory, principles, and drawing techniques for the design of jigs and fixtures. Two lecture, two lab hours per week.
Prerequisite(s): INT 109 or INT 112 and DRT 198

116 CNC Operations 3 Cr. Hrs.

Production operation of CNC machining centers and CNC lathes. Set up and operation of CNC machines in a production environment with emphasis placed on production troubleshooting, inspection, reporting, and process improvement. Two lecture, two lab hours per week.

121 Introduction to Pattern Making 2 Cr. Hrs.

Introduction to patternmaking tools and safe operation practices.

COURSES

122 Basics of Pattern Making 2 Cr. Hrs.

The various constructions, machinery and processes are demonstrated.

Prerequisite(s): INT 121

131 Basic Moldmaking 3 Cr. Hrs.

Basic topics of moldmaking including material properties, injection, transfer and blow molding.

132 Advanced Moldmaking 3 Cr. Hrs.

Advanced aspects of moldmaking including die casting, rubber molds, blow molding and mold construction.

Prerequisite(s): INT 131

141 Applied Shop Mathematics I 3 Cr. Hrs.

Topics in arithmetic and algebra that relate durability with problems encountered in a metal working training program.

Prerequisite(s): DEV 085

142 Applied Shop Mathematics II 3 Cr. Hrs.

Theory and applications of plane geometry encountered in the metal working industry.

Prerequisite(s): INT 141

143 Applied Shop Mathematics III 3 Cr. Hrs.

Theory and application of trigonometry as applied to the metal working industry: compound angles, tapers and measurement set-ups.

Prerequisite(s): INT 142

145 Shop Floor Programming 3 Cr. Hrs.

Operation and programming of conversational controlled two-axis milling machines. Includes programming and manufacturing a variety of machined parts utilizing Protrak and Amilam two-axis CNC controls. Two lecture, two lab hours per week.

Prerequisite(s): INT 109 or INT 112 or approval of chairperson

151 Principles of Welding 3 Cr. Hrs.

General methods of welding, oxyacetylene, brazing, soldering, ARC, TIG, MIG, Heliarc, including typical operations such as butt, lap, fillet, and vee welds.

152 ARC Welding 3 Cr. Hrs.

Theory and background skills of ARC, TIG, MIG, and Heliarc welding. Hands-on projects and demonstrations.

153 Oxyacetylene Welding 3 Cr. Hrs.

Theory and background skills of oxyacetylene welding, brazing, soldering and torch cutting. Hands-on projects and demonstration. Three lecture, one lab hour per week.

161 Machine Operations Laboratory I 8 Cr. Hrs.

The student will be required to complete the following machine shop projects: T-slot cleaner, taper wedge, parallels, drift punch, center punch, edge finder, lathe and grinder, parallel clamp, non-twist clamp, 1-2-3 blocks, solid square, angle plate, and screw jack. Two lecture, eighteen lab hours per week.

162 Machine Operations Laboratory II 8 Cr. Hrs.

The student will be required to complete the following machine shop projects: surface gage, magnetic parallels (2), V-block and clamp assembly, and double V-block and clamp assembly. Two lecture, eighteen lab hours per week.

Prerequisite(s): INT 161

163 Machine Operations Laboratory III 8 Cr. Hrs.

The student will be required to complete the following machine shop projects: sinebar, grinding vise, and other optional projects. Two lecture, eighteen lab hours per week.

Prerequisite(s): INT 162

165 Advanced Machine Operations Laboratory 4 Cr. Hrs.

In-depth study of machine tool practices in the areas of grinders, shapers, rotary tables, welding, electrical machining processes, precision layout practices, and inspection practices. A project relating to course topics is required. Three lecture, two lab hours per week.

Prerequisite(s): INT 109 or INT 112

204 Computer Numerical Control Lathe Programming 3 Cr. Hrs.

Computer Numerical Control lathe programming and machine tool operation. Two lecture, two lab hours per week.

Prerequisite(s): INT 113

209 Computer Numerical Control Wire Electrical Discharge Machining Programming 3 Cr. Hrs.

Computer Numerical Control Wire Electrical Discharge Machining (EDM) programming and machine tool operation. Two lecture, two lab hours per week.

Prerequisite(s): INT 113

211 Advanced Computer Numerical Control 3 Cr. Hrs.

Basics of CNC programming language, the programming format and CNC tools and equipment. Two lecture, two lab hours per week.

Prerequisite(s): INT 113

212 Computer Assisted Programming 3 Cr. Hrs.

Programming assignments and implementation with CNC equipment. Two lecture, two lab hours per week.

Prerequisite(s): INT 211

213 Computer Numerical Control Applications 3 Cr. Hrs.

Programming and operation of machines using single part and large volume production techniques with emphasis on work holding, rough machining, high precision machining, computer assisted programming, G-code programming, and conversational programming; production of a variety of products. Two lecture, two lab hours per week.

Prerequisite(s): INT 212

225 Tool Design 3 Cr. Hrs.

Scientific principles involved in the design and use of tools used for material removal, press working, casting, joining and inspection processes. Two lecture, two lab hours per week.

Prerequisite(s): INT 114

226 Advanced Job Processing 3 Cr. Hrs.

Introduction to the planning of manufacturing for machined parts, from receipt of the order to shipped parts to the customer. Provides additional instruction and problem solving skills on how products are routed through a factory. Designed for toolmakers, machinists and CNC technicians. Two lecture, two lab hours per week.

Prerequisite(s): DRT 218. INT department chairperson signature

227 Advanced CNC Mill Programming 3 Cr. Hrs.

Designed for toolmakers, machinists and Computer Numerical Control (CNC) technicians. This class introduces students to the concept of advanced CNC mill programming techniques. It also introduces the application of multi-axis machining procedures. Two lecture, two lab hours per week.

Prerequisite(s): INT 226 and DRT 218 and QET 117

228 Advanced CNC Milling 3 Cr. Hrs.

Designed for toolmakers, machinists and Computer Numerical Control (CNC) technicians. This class introduces students to the concept of advanced CNC mill applications and procedures. It also teaches advanced process refining, advanced set-up procedures, and in-process inspection. Two lecture, two lab hours per week.

Prerequisite(s): INT 226 and DRT 218 and QET 117. INT department chairperson signature

270 Industrial Technology Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

Prerequisite(s): Approval of chairperson

297 Special Topics in Tooling & Machining R 3 - 12 Cr. Hrs.

Provides opportunities to receive credit for special interest topics within the discipline. Brief description of the topics will be given and prerequisites identified when offered. Lab time will be part of some content.
Prerequisite(s): Permission of chairperson

Journalism (JOU)

101 Journalism I 3 Cr. Hrs.

Kinds of newspaper stories, practice in writing new stories, features and interviews, the history, scope and functions of newspapers. Keyboarding skills are required.

Prerequisite(s): ENG 111

102 Journalism II 3 Cr. Hrs.

Advanced reporting and news writing with practice in writing news stories, editorials and sports articles. Work on the college newspaper or other journalistic activity providing laboratory experience.

Prerequisite(s): JOU 101

270 Journalism Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

Japanese (JPN)

100 Conversational Japanese I 3 Cr. Hrs.

Develops conversational skills in Japanese by analyzing the basic pattern and structure of the language and by promoting mastery of basic vocabulary and idiomatic expressions. Intensive classroom discussion in Japanese is an integral part of the course.

105 Conversational Japanese II 3 Cr. Hrs.

Develops further the conversational skills in Japanese acquired in JPN 100 presenting a more complex syntactical pattern and idiomatic structure. Promotes free expression in Japanese within more specific and complex cultural contents.

Prerequisite(s): JPN 100

Liberal Arts & Sciences (LA)

101 Student Success Experience 2 Cr. Hrs.

Campus resources overview, general education introduction and skills development; diversity; learning/teaching styles; study skill; planning and goal setting.

Law (LAW)

101 Business Law I 4 Cr. Hrs.

The American legal system as it relates to business transactions including the judicial system and sources of law, legal procedures, torts, business ethics and social responsibility, contracts, property, employment law, partnerships and corporations.

102 Business Law II 4 Cr. Hrs.

The American legal system as it relates to business transactions including the laws of commercial paper, secured transactions, agency, corporations, partnerships, bankruptcy, consumer rights, insurance, and crimes that affect businesses.

Prerequisite(s): LAW 101

103 Consumer Law 3 Cr. Hrs.

Review of state and federal consumer laws and how to enforce personal rights under the laws which regulate advertising, privacy, identity theft, debt collection, car repairs, lemon cars, warranties, purchasing and leasing a car, home improvement fraud, predatory lending, telemarketing, spam, Internet sales, and personal health care issues.

104 Environmental Law 3 Cr. Hrs.

Protection of air, water, and land as it relates to the individual, business and government; role of administrative agencies, legislatures, industry and advocacy groups in prevention and control of pollution in the physical environment.

111 Personal Law 3 Cr. Hrs.

The laws relating to homeowning, marriage, motor vehicles, insurance, investments, and estate planning. Subjects are approached in non-technical terms in an effort to aid understanding of laws that effect personal choices and decisions.

144 Domestic Civil Protection Orders 2 Cr. Hrs.

Basic understanding of domestic violence dynamics and working knowledge of Civil Protection Order (CPO) law and procedures. Includes working knowledge of the forms and orders required to put a CPO into effect and enforce it. Also includes societal barriers and justice system barriers that impede safety and justice for victims of domestic violence and their children.

297 Special Topics in Law R 0.5 - 6 Cr. Hrs.

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

Law Enforcement (LEP)

080 Private Police Officer Training Academy R 3 Cr. Hrs.

An introductory course in Private Security functions including legal aspects, patrol duties, defense measures, first aid, and crowd control techniques. This 132-hours training program delivers content for preparing participants with the basic skills and knowledge necessary to test for the state's certification as a security officer by the Ohio Peace Officer Training Commission, Office of the Attorney General, State of Ohio.

101 Constitutional Law 3 Cr. Hrs.

Elements of Constitutional law of frequent concern in law enforcement. Utilizing the Constitution and pertinent Supreme Court rulings, the development of criminal law and its effect on law enforcement procedures from crime prevention to courtroom appearance is covered.

102 Criminal Law 3 Cr. Hrs.

Current federal, state, and local laws and codes pertaining to arrest, search and seizure, and related topics.

104 Criminal Evidence & Procedures 3 Cr. Hrs.

Court systems and principles of constitutional, federal, state, and local laws, gathering of facts effectively and legally, presentation of evidence in admissible form, and the legal process from arrest through confinement and release.

105 Introduction to Law Enforcement & Criminal Justice 3 Cr. Hrs.

History, development, philosophy and constitutional aspects of law enforcement in a democratic society. The agencies and processes involved in the administration of criminal justice.

107 Security Administration 3 Cr. Hrs.

The historical, philosophical and legal framework for security operations as well as detailed presentations of specific security programs and processes currently and historically used in providing security. Protection of governmental and proprietary systems, persons and facilities.

115 Police Operations 3 Cr. Hrs.

Line activities of law enforcement agencies with emphasis on the patrol functions and the prevention of crime: includes traffic, investigations, juvenile, vice and other specialized units.

117 Principles of Loss Prevention 3 Cr. Hrs.

Functional operations of various specialized areas of security such as theft and risk control, security surveys, and loss prevention programs and management in proprietary and governmental institutions.

125 Police Organization & Administration 3 Cr. Hrs.

Principles of organization and management as applied to law enforcement agencies. Concepts of organizational behavior, administration of staff units.

130 Family Violence 3 Cr. Hrs.

Domestic violence and how all affected (the family, authorities, legal professions, and educators) can deal with it. Also offered as SOC 130; students may enroll in either course, but not both.

190 Law Enforcement Workshop R 1 - 6 Cr. Hrs.

Workshop topics are offered throughout the academic year in a variety of criminal justice subject areas and for varying lengths of time.

191 Law Enforcement Workshop II R 1 - 6 Cr. Hrs.

Workshop topics are offered throughout the academic year in a variety of criminal justice subject areas and for varying lengths of time.

205 Criminal Investigation 3 Cr. Hrs.

Fundamentals of criminal investigation including theory of investigation, crime scene to courtroom, conduct at crime scenes, interviewing.

209 Computer Crime 3 Cr. Hrs.

Identifying computer security needs, preventing computer abuses, learning techniques for investigating computer crime, and how to improve computer security with advanced management and equipment methods.

215 Introduction to Forensic Science 3 Cr. Hrs.

Physical evidence, collection, identification, preservation, and transportation, crime laboratory capability and limitations. Examination of physical evidence within resources of the investigator and demonstration of laboratory criminalistics to the extent supported by existing facilities.

217 Current Security Problems 3 Cr. Hrs.

An analysis of security problem areas. Specific areas will be analyzed for further research by individual students depending upon interest.

218 Crime Prevention 3 Cr. Hrs.

Anticipating, recognizing, and appraising crime risks and initiating action to remove or reduce them. Prepares the student of law enforcement to assist the community with its security problems and to establish a crime prevention program within a police agency.

225 Intergroup Relations of Police Officers 3 Cr. Hrs.

Police and community relations emphasizing the police officer's role. An understanding of conflict between groups and individuals. Application of human relations as an approach to resolving conflict and how to use it creatively.

235 Comparative Police Systems 3 Cr. Hrs.

Compares the various aspects of police systems in America and abroad. Emphasis on contemporary concepts within each major law enforcement agency.

247 Organized Crime in the United States 3 Cr. Hrs.

Organized crime theory, techniques, activity and depth of current national and local involvement.

270 Police Internship R 1 - 4 Cr. Hrs.

Participation in, and observation of, a variety of police functions at a local police department. Under agency and faculty supervision, the student will have an opportunity to observe the functions of police and participate on a limited basis. There will be a pre-determined number of hours of training and field experience.

280 Basic Peace Officer Training Academy R 1 - 12 Cr. Hrs.

Training required by the state of Ohio for a police recruit to attain status as a sworn peace officer. The curriculum includes detailed instruction of 450 hours in those police function deemed essential by the state of Ohio before an individual can be certified to perform police duties.

295 Seminar in Law Enforcement & Administration of Justice R 3 Cr. Hrs.

Identification and analysis of current issues and problems in law enforcement and the administration of criminal justice.

Literature (LIT)**201 Survey of English Literature (to 1660) 3 Cr. Hrs.**

Chronological survey of major writers of English poetry, drama, and prose from the beginnings through 1660.

202 Survey of English Literature (1660-1832) 3 Cr. Hrs.

Chronological survey of major writers of English poetry, drama, and prose from the 1660 to 1832.

203 Survey of English Literature (1832-present) 3 Cr. Hrs.

Chronological survey of major writers of English poetry, drama, and prose from 1832 through the modern era.

205 Modern Short Story 3 Cr. Hrs.

Studies literary techniques and thematic concerns of modern writers.

211 Survey of American Literature I (Colonial & Early 19th Century) 3 Cr. Hrs.

A chronological survey of notable American authors from the colonial to the Civil War eras.

212 Survey of American Literature II (Later 19th Century) 3 Cr. Hrs.

Notable American authors from the Civil War era to the 1920's.

213 Survey of American Literature III (20th Century) 3 Cr. Hrs.

Notable American authors from the 1920s until the present.

215 Introduction to Science Fiction Literature 3 Cr. Hrs.

Literary values, themes, and techniques of science fiction.

217 Images of Women in Literature 3 Cr. Hrs.

Major images of women in literature, with emphasis on contemporary literature's role in both reflecting and shaping society's views of women.

219 Literature of Aviation 3 Cr. Hrs.

An analysis of five works of fiction and non-fiction that reflect both the technological and the humanistic impact of aviation in the twentieth century.

227 Introduction to Shakespeare 3 Cr. Hrs.

Drama as theatrical art and as interpretation of fundamental human experience. Studies Shakespearean tragedy, history, and comedy.

230 Great Books of the Western World 3 Cr. Hrs.

A chronological survey of the major literary works and periods of Western culture beginning with the Greeks and progressing through the Middle Ages, the Renaissance, Neo-Classicism and Enlightenment, Romanticism, Realism, and Modernism. *Prerequisite(s): ENG 113*

233 Native American Literature from Myth to Momaday 3 Cr. Hrs.

Introduction to Native American literature providing an understanding of how traditional myth, song, legend and ceremony shape and inform the works of contemporary writers. *Prerequisite(s): ENG 111*

234 Literature of Africa, Asia, & Latin American 3 Cr. Hrs.

Selected, thematic study of major literary works of Africa, Asia, and Latin America, emphasizing universal values and the commonality of experience.

236 African-American Literature 3 Cr. Hrs.

Overview of the African-American literary tradition with emphasis on early folk tales, the Harlem Renaissance, the Black Revolution and contemporary social expression.

238 Appalachian Literature 3 Cr. Hrs.

Literary themes of selected contemporary writers identified with the Appalachian United States.

240 Children's Literature 3 Cr. Hrs.

A study of the literary elements in children's literature and its value in society. Classic and contemporary works will be examined and award winning texts will be discussed.

Prerequisite(s): ENG 111

259 Introduction to Horror Fiction 3 Cr. Hrs.

Literary values, themes, and techniques of horror fiction.

267 Mythology in Literature 3 Cr. Hrs.

Analysis of relationship between myths and literature using selected Jungian archetypes to show how religion, culture, and folk tales intertwine.

297 Special Topics in Literature
R 1 - 6 Cr. Hrs.

Opportunity to receive credit for special literary topics such as mythology in literature, the family in literature, black literature, etc.

Management (MAN)

105 Introduction to Business 3 Cr. Hrs.

The American business system and basic principles of the free market system. Includes basic introduction of concepts of management, marketing, economic, and accounting and other important business principles.

110 Introduction to International Business 3 Cr. Hrs.

The global dimensions of business; an overview of theories and institutions of trade, investment, and management emphasizing the managerial perspective on issues arising from international business and global operations.

201 Introduction to Supervision 3 Cr. Hrs.

Strategies and techniques for current, as well as prospective, supervisors emphasizing the assessment of skills required, the analysis of situational factors, and the development of creative approaches to effective supervising.

205 Principles of Management 3 Cr. Hrs.

Basic management functions are analyzed through the various theories of management including the "Process School."

207 Total Quality Management 3 Cr. Hrs.

Introduction to a managerial environment in which the student practices providing the customer with exceptional value, developing cross-functional organizational systems, and developing methods for continuous improvement.

Prerequisite(s): MAN 105 or MAN 205

209 Perspectives on Management 3 Cr. Hrs.

Examines the development of contemporary management as a discipline and a practice, in the context of social and cultural influences.

Prerequisite(s): MAN 205

210 Introduction to Project Management 3 Cr. Hrs.

Basic project management concepts and activities are analyzed through the various theories of management functions and resources.

216 Managing Operations 3 Cr. Hrs.

The design, planning, organization, and control of productive systems.

Prerequisite(s): MAT 122, BIS 160

225 Human Relations & Organizational Behavior 3 Cr. Hrs.

Applications of modern psychological and organizational behavior principles in the leadership, training, and motivating of today's worker in modern work surroundings including quality of work life.

Prerequisite(s): MAN 205

226 Human Relations Issues 3 Cr. Hrs.

Application of Quality Management and organizational principles to human relations issues in the work place with an emphasis on communication and performance improvement.

Prerequisite(s): MAN 205

230 Motivational Concepts & Applications 1 Cr. Hr.

Practical interactive application of current motivational principles. Emphasis is placed on behavior modification, work groups, and the use of gain sharing.

231 Leadership in Work Groups 1 Cr. Hr.

Practical applications of leadership, team principles and work group communications within multiple types of organizational environments including non-profit, competition based and the governmental sector. Emphasis is placed on the leader's roles in group development, decision making and communication methods.

232 The Organizational System 1 Cr. Hr.

Introduction to the developmental and improvement aspects of organizational structure and design. Emphasis is placed on the major components affecting the organizational system including: organizational culture and change, Total Quality Management and re-engineering and international and cross-cultural organizational behavior.

237 Human Resource Management 3 Cr. Hrs.

Contemporary approach to human resource management environment using a diagnostic model of internal and external influences.

Prerequisite(s): MAN 205

238 Human Resource Management Applications 3 Cr. Hrs.

Case method applied to contemporary human resource management concepts, such as methods of communication, motivation, performance reviews and other personnel issues to achieve a productive and efficient work climate.

Prerequisite(s): MAN 237

245 Office Management 3 Cr. Hrs.

Skills and abilities needed to manage the automated office emphasizing technology, supervision, policies and procedures, productivity, training, and the planning, implementation, structure, and operations of office systems.

Prerequisite(s): MAN 205

251 Logistics Management 3 Cr. Hrs.

Emphasis on interrelated and independent systems, phases and techniques in logistics management, physical and automated systems comprising the logistics process, associated management techniques and skills, interrelationships and interdependencies of line/staff management and the various forces of the logistics system.

Prerequisite(s): MAN 205

255 Management Information Systems I 3 Cr. Hrs.

Management perspective of information systems activity from development through implementation.

Prerequisite(s): MAN 205

256 Informations Systems Applications 3 Cr. Hrs.

Techniques for conducting a systems project; management concepts/tools applied in systems analysis/design.

Prerequisite(s): MAN 255

260 Management Science I 3 Cr. Hrs.

Application of quantitative methods used by managers and business owners to facilitate their decision making process. Various mathematical concepts are used. Computer application is also used to demonstrate the formulation of mathematical models, systems design, and simulation.

Prerequisite(s): CIS 119, MAT 122

261 Management Science II 3 Cr. Hrs.

A continuation of MAN 260. Greater emphasis is placed on problem solving and analysis.

Prerequisite(s): MAN 260

263 The Business of Art: A Historical Perspective 3 Cr. Hrs.

An interdisciplinary course which tracks the historic evolution of the seemingly unnatural partnership between business and art. The course concentrates specifically on the creation, marketing and acquisition of art through the ages with emphasis on current day trends.

265 Introduction to E-Commerce 3 Cr. Hrs.

Electronic commerce basics. A definition of e-commerce, and an explanation of how e-commerce differs from traditional commerce. The history, development and impact of e-commerce are covered. Discussion of the global impact of e-commerce, and how e-commerce relates to business practices. An overview of marketing, legal issues, accounting and the technology involved in e-commerce are all discussed.

270 Management Internship R 1 - 9 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

278 Management Capstone 3 Cr. Hrs.

Assessment of achievement by business-management degree students in attaining program outcomes by employing reflective learning through demonstration of management related principles and practices.

Prerequisite(s): MAN 295

295 Management Seminar 3 Cr. Hrs.

Application of previously learned management concepts through case study, readings, and discussion of contemporary issues.

Prerequisite(s): MAN 201 and MAN 205 and MAN 216 and MAN 225 and MAN 255 and approval of faculty member

296 Special Projects in Business R 1 - 6 Cr. Hrs.

Variations of experiential learning by way of group projects, independent study, and real world simulations.

297 Special Topics in Management R 0.5 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (such as TV and newspaper) as well as special interest topics within the discipline. Only six credit hours earned by Special Topics courses can apply toward an associate degree in Business.

Medical Assistant Technology (MAS)**101 Introduction to Medical Assisting 2 Cr. Hrs.**

Overview of the health care industry, including organization of ambulatory care practice groups, solo practice offices, hospitals, professional organizations, and federal health care programs; health care delivery trends and issues; role of the medical assistant in different work environments.

102 Medical Office Accounting 3 Cr. Hrs.

Principles of bookkeeping, automated and manual patient financial accounting, collection techniques, employee payroll, banking procedures, medical supplies purchasing and inventory. Two lecture, two lab hours per week.

Prerequisite(s): MAS 101 and HIM 121 and restricted to majors

103 Medical Law & Ethics 2 Cr. Hrs.

Fundamentals of medical ethics and law in the medical office setting with special emphasis on patient confidentiality; physician-patient relationship; implied, verbal and written consent; professional liability; malpractice, contracts, statutory reports, medicolegal issues; ethical issues of modern health care.

Prerequisite(s): MAS 101 and approval of chairperson

104 Basic Clinical Assisting Procedures 3 Cr. Hrs.

Introduction to clinical assisting procedures in the medical office emphasizing patient preparation, medical history interviews, vital signs, positioning and draping, medical asepsis, assisting with physical exams, eye and ear assessment and procedures, and pediatric health fair. Two lecture, four lab hours per week.

Prerequisite(s): MAS 103 and HIM 122 and ALH 142 and ALH 106 and restricted to majors

105 Medical Office Management 3 Cr. Hrs.

Administrative duties in a physician's office, including scheduling, monitoring patient appointments, outpatient procedures, hospital admissions, medical and office equipment maintenance, storing supplies and pharmaceuticals, hiring, evaluating and managing office personnel. Two lecture, two lab hours per week.

Prerequisite(s): MAS 102 and ENG 132 and restricted to majors

106 Medical Office Emergency Procedures 3 Cr. Hrs.

Techniques required for patient assessment and treatment during medical office emergencies; role of the medical assistant in urgent situations with the physician present and also during the physician's absence; application of accident prevention principles and maintenance of emergency

equipment/supplies in the medical office. Two lecture, four lab hours per week.

Prerequisite(s): ALH 140 and MAS 104 and restricted to majors

120 Health Unit Coordinator I 4 Cr. Hrs.

The role of the health unit coordinator as an allied health professional will be the focus of this course. A review of the history of the profession, the hospital environment, and management of the nursing unit will be covered.

Prerequisite(s): BIO 107 and BIO 108 and HIM 121

121 Health Unit Coordinator II 3 Cr. Hrs.

This course will reinforce the role of the professional health unit coordinator in the health care facility. Emphasis will be placed on the transcription of specific physician and nursing orders including medication, treatment, diagnostic, and therapeutic orders. In addition, there will be a required laboratory experience (20 hours) at a health care facility observing and working with an experienced health unit coordinator. Two lecture, two lab hours per week.

Prerequisite(s): MAS 120

172 Lab for MAS 102

Laboratory must be taken with MAS 102.

174 Lab for MAS 104

Laboratory must be taken with MAS 104.

175 Lab for MAS 105

Laboratory must be taken with MAS 105.

176 Lab for MAS 106

Laboratory must be taken with MAS 106.

201 Family Practice Clinical Assisting Procedures 3 Cr. Hrs.

Intermediate level clinical procedures performed in a family practice setting such as medical microbiology, minor office surgery, bandaging and dressing changes, administering therapeutic modalities, preparing and administering medications, pediatric immunizations and procedures, allergy procedures, and patient teaching. Two lecture, four lab hours per week.

Prerequisite(s): MAS 104 and MAT 106 and restricted to majors

202 Insurance & Patient Records 3 Cr. Hrs.

Fundamentals of private and public insurance programs, Workers' Compensation claims, Medicaid and Medicare claims; medical records administration, including creating, maintaining, protecting and preservice records. Two lecture, two lab hours per week.

Prerequisite(s): HIM 122 and HIM 260 and HIM 261 and ALH 104

203 Medical Assisting Directed Practice I
2 Cr. Hrs.

Introduction to the ambulatory care clinical setting involving structured observation and participation in the administrative and clinical aspects of patient care under the supervision of a licensed physician or certified medical assistant; assisting with patient preparation, physical examinations, scheduling appointments, book-keeping tasks and medical transcription. One lecture, six clinical hours per week.
Prerequisite(s): MAS 104 and COM 206 and MAS 105 and ALH 140 and restricted to majors

204 Medical Assisting Directed Practice II
3 Cr. Hrs.

Intermediate experience in a physician's office involving structured observations and participation in the administrative and clinical aspects of patient care under the supervision of a licensed physician or certified medical assistant; assisting with minor office surgery, therapeutic modalities, administration of medications, insurance coding/claims, care of patient records and other office management skills. One lecture, ten clinical hours per week.
Prerequisite(s): MAS 203 and restricted to majors

205 Medical Assisting Directed Practice III
5 Cr. Hrs.

Advanced experience in a physician's office involving structured observations and participation in the administrative and clinical aspects of patient care under the supervision of a licensed physician; assisting with specialized clinical procedures, performing electrocardiograms, venipunctures and basic laboratory tests and advanced office management skills. One lecture, twenty clinical hours per week.
Prerequisite(s): MAS 204 and restricted to majors

206 Special Clinical Assisting Procedures
3 Cr. Hrs.

Techniques required to perform advanced/specialized procedures such as assisting with sigmoidoscopy, basic respiratory procedures, OB/GYN procedures, physical agents to promote tissue healing, and basic nutrition. Two lecture, four lab hours per week.
Prerequisite(s): MAS 201 and ALH 201

207 Medical Laboratory Procedures
3 Cr. Hrs.

Techniques required to perform laboratory procedures in a medical office, including collection of specimens for testing/transport, venipuncture, urinalysis, cultures, quality control, and laboratory safety. Two lecture, four lab hours per week.
Prerequisite(s): MAS 104 and ALH 142 and restricted to majors

208 Medical Assisting Seminar 2 Cr. Hrs.

Discussion of directed practice experiences; preparation for the American Association of Medical Assistants (AAMA) National Certification Examination through student presentations and discussion topics relative to the medical assisting profession.
Prerequisite(s): MAS 204 and restricted to majors

281 Lab for MAS 201
*Laboratory must be taken with MAS 201.***282 Lab for MAS 202**
*Laboratory must be taken with MAS 202.***283 Lab for MAS 203**
*Laboratory must be taken with MAS 203.***284 Lab for MAS 204**
*Laboratory must be taken with MAS 204.***285 Lab for MAS 205**
*Laboratory must be taken with MAS 205.***286 Lab for MAS 206**
*Laboratory must be taken with MAS 206.***287 Lab for MAS 207**
*Laboratory must be taken with MAS 207.***297 Special Topics in Medical Assisting Technology R 0.5 - 6 Cr. Hrs.**

Provides opportunities to receive credit for non-traditional courses as well as special interest topics within the discipline.

Mathematics (MAT)**101 Elementary Algebra 4 Cr. Hrs.**

Order of operations; exponents; absolute values; properties of real numbers; operations with fractions, signed numbers, polynomials and rational expressions; simplifying algebraic expressions; solving first degree equations and inequalities and second degree equations by factoring and applied problems; factoring polynomials; introduction to graphing.
Prerequisite(s): DEV 108 or satisfactory score on placement test

102 Intermediate Algebra 5 Cr. Hrs.

Factoring; operations with rational expressions, radical expressions and complex numbers; relations and functions; solving equations with rational expressions, equations with radical expressions, quadratic equations by completing the square and the quadratic formula, equations quadratic in form, systems of linear equations in two and three variables, applied problems, compound and absolute value inequalities, quadratic and rational inequalities; equations of lines; set operations; simplifying radical expressions; graphing lines and parabolas.
Prerequisite(s): MAT 101 grade of "C" or better or satisfactory score on placement test

105 Business Mathematics 4 Cr. Hrs.

Arithmetic of decimals and fractions, percentages, checking accounts, taxes, insurance, payroll, trade pricing, retail pricing, simple and compound interest, promissory notes, annuities, loans and elementary statistics.
Prerequisite(s): DEV 085 or DEV 108 or MAT 101 or satisfactory score on placement test

106 Allied Health Mathematics 4 Cr. Hrs.

Applications of fractions, decimals, and percentages, the metric system, the apothecary system, signed numbers, first-degree equations, literal equations, ratios and proportions, instrumentation, graphing and interpreting graphs, frequency distributions, central tendency, and scientific notation.
Prerequisite(s): DEV 085 or DEV 108 or MAT 101 or qualifying score on mathematics placement test

108 Math & the Modern World 3 Cr. Hrs.

Applications of mathematics to modeling real world problems from the behavioral, computational, managerial, and social sciences including graph theory, linear programming, probability, descriptive and inferential statistics, game theory, logical reasoning, and growth and decay.
Prerequisite(s): MAT 102 or MAT 116 or MAT 131 or sufficiently high score on mathematics placement test

109 Nursing Mathematics 3 Cr. Hrs.

Application of basic mathematics concepts to nursing situations, including fractions, decimals, percentages, measurement systems (metric, apothecary, household), intravenous drip rates, pediatric formulas, measurements of powders, capsules, liquids and tablets, reading and interpreting graphs.
Prerequisite(s): Acceptance into Nursing program or permission of the Mathematics department

116 College Algebra 5 Cr. Hrs.

Polynomial, rational, inverse, exponential and logarithmic functions and their graphs, roots of polynomial functions, conic sections, systems of equations, matrices and determinants, sequences and series. A scientific calculator is required. A graphing calculator is required in some sections.
Prerequisite(s): Grade of "C" or better in MAT 102 or MAT 117 or MAT 132 or MAT 133 or MAT 201 or MAT 202 or MAT 203 or equivalent or satisfactory score on mathematics placement test

117 Trigonometry 4 Cr. Hrs.

Trigonometric functions of angles, solving right and oblique triangles, identities, vectors, trigonometric equations, radian measure, graphs of trigonometric functions, inverse trigonometric functions, and complex numbers. A scientific calculator is required.

Prerequisite(s): Grade of "C" or better in MAT 116 or equivalent or satisfactory score on mathematics placement test

121 Mathematics for Business Analysis 5 Cr. Hrs.

Applications of mathematics to business analysis. Polynomials, fractional forms, exponents, radicals, equations and inequalities, graphs and functions, systems of equations, matrices, linear programming, permutations and combinations, simple and compound interest and annuities.

Prerequisite(s): Grade of "C" or better in MAT 101 or MAT 102 (or equivalent) or satisfactory score on mathematics placement test

122 Statistics I 4 Cr. Hrs.

Statistical techniques and methodology. Graphical and tabular presentation of data, probability, parameters, statistical distributions, sampling, confidence intervals, and tests of hypotheses.

Prerequisite(s): Grade of "C" or better in MAT 116 or MAT 121 or satisfactory grade on MAT 122 mathematics placement test

131 Technical Mathematics I 5 Cr. Hrs.

Accuracy and precision with approximate numbers, functions, graphs, right triangle trigonometry, systems of linear equations, factoring, rational expressions, quadratic equations. Scientific calculator required.

Prerequisite(s): Grade of "C" or better in MAT 101 or sufficient score on mathematics placement test

132 Technical Mathematics II 5 Cr. Hrs.

Trigonometric functions of angles, vectors, solving oblique triangles, graphs of trigonometric functions, complex numbers, exponential and logarithmic functions, systems of equations, and theory of equations. Scientific calculator required.

Prerequisite(s): Grade of "C" or better in MAT 131 or sufficient score on mathematics placement test

133 Technical Mathematics III 5 Cr. Hrs.

Conic sections, polar coordinates, derivatives of algebraic functions, applications of the derivative, integration, applications of integration. Scientific calculator required.

Prerequisite(s): Grade of "C" or better in MAT 132 or sufficient score on mathematics placement test

134 Technical Mathematics IV 5 Cr. Hrs.

Integration techniques, graphs of trigonometric functions, derivatives of transcendental functions, infinite series, and differential equations. Scientific calculator required.

Prerequisite(s): Grade of "C" or better in MAT 133 or sufficient score on mathematics placement test

141 Numerical Concepts for Teachers 4 Cr. Hrs.

Introduction to the basic mathematical concepts of arithmetic and problem solving as appropriate for early and middle childhood teachers. An inquiry and activity based approach is used to explore problem solving, sets, functions, numeration systems, whole numbers, basic number theory, integers, rational numbers, and real numbers. Three lecture, two lab hours per week.

Prerequisite(s): Grade of "C" or better in MAT 102 or sufficient score on mathematics placement test

142 Algebra & Data Analysis for Teachers 4 Cr. Hrs.

Introduction to the concepts of using functions to model data; basic probability; and basic statistics as appropriate for early and middle childhood teachers. An inquiry and activity-based approach is used to explore linear and quadratic functions, linear inequalities, modeling data with functions, probability concepts, descriptive statistics, and basic inferential statistics.

Prerequisite(s): Grade of "C" or better in MAT 141 and score of 90% or better on Math Proficiency Test for Teachers

143 Geometry & Measurement for Teachers 4 Cr. Hrs.

This course introduces the concepts of geometry and measurement as appropriate for early and middle childhood teachers. An inquiry and activity based approach is used to explore basic two- and three-dimensional geometric concepts, basic geometric constructions, congruence, similarity, measurement, computing area and volume, symmetry, and transformations of two-dimensional figures.

Prerequisite(s): Grade of "C" or better in MAT 142 or grade of "C" or better in both MAT 110 and MAT 141

151 Introduction to Mathematical Modeling 3 Cr. Hrs.

Includes data analysis (linear and nonlinear methods), modeling with continuous functions, modeling with discrete mathematics (matrices and graph theory).

Prerequisite(s): MAT 116 or equivalent

201 Calculus & Analytic Geometry I 5 Cr. Hrs.

Cartesian coordinate system, functions, limits and continuity of functions, the derivative and its applications, the integral and the fundamental theorem of calculus. This is the first of a four quarter sequence.

Prerequisite(s): Satisfactory score on mathematics placement test or grade of "C" or better in MAT 117 or MAT 133

202 Calculus & Analytic Geometry II 5 Cr. Hrs.

The second quarter in a four quarter sequence for science and engineering majors. Applications of the definite integral, derivatives and integrals involving exponential, logarithmic, trigonometric and hyperbolic functions and their inverses, techniques of integration, indeterminate forms, L'Hopital's Rule, improper integrals and conic sections.

Prerequisite(s): Satisfactory score on mathematics placement test or grade of "C" or better in MAT 201 or 134 or 203 or 204 or 215

203 Calculus & Analytic Geometry III 5 Cr. Hrs.

The third course in a four quarter sequence for science and engineering majors. Infinite sequences and series, Taylor series, parametric equations, polar coordinates, solid analytic geometry, vectors in the plane and in space, vector valued functions, arc length and curvature.

Prerequisite(s): Grade of "C" or better in MAT 202 or 204 or 215 or satisfactory score on mathematics placement test

204 Calculus & Analytic Geometry IV 5 Cr. Hrs.

This is the last course in a four quarter sequence for science and engineering majors, functions of several variables, partial derivatives with applications, multiple integrals with applications, line integrals, surface integrals, vector fields, Green's Theorem, the Divergence Theorem and Stokes's Theorem.

Prerequisite(s): MAT 203. Grade of "C" or better in one of the following: MAT 203 or MAT 215 or MAT 216. Satisfactory score on mathematics placement test

215 Differential Equations 5 Cr. Hrs.

Solutions and applications of ordinary differential equations including separable, exact, homogeneous and non-homogeneous linear equations and others. Numerical approximation methods as well as substitutions, the total differential, separation of variables, integrating factors, undetermined coefficients, variation of parameters, Laplace Transforms and power series methods are covered.

Prerequisite(s): MAT 203. Grade of "C" or better or satisfactory score on mathematics placement test

216 Elements of Linear Algebra

4 Cr. Hrs.

Systems of linear equations, matrices, determinants, linear transformations, Euclidean n-space, coordinate vectors, abstract vector spaces, dimension and rank, eigenvalues, eigenvectors.

Prerequisite(s): Grade of "C" or better in MAT 203 or satisfactory score on mathematics placement test

218 Calculus for Business & Economics

5 Cr. Hrs.

Functions and graphs, limits and continuity, the derivative, techniques of differentiation, applied problems in business and economics, exponential and logarithmic functions, techniques of integration, applications of integration.

Prerequisite(s): Grade of "C" or better in one of the following: MAT 116 or MAT 117 or MAT 133 or MAT 134 or MAT 151 or MAT 201 or sufficiently high score on mathematics placement test

220 Statistics II

4 Cr. Hrs.

Statistical inferences including estimation, confidence intervals, and tests of hypotheses for means, standard deviation, and proportions; analysis of variance; regression analysis; chi-square; business applications. Students will develop a basic competency in using a computer spreadsheet to perform statistical calculations.

Prerequisite(s): "C" or better in MAT 122 or satisfactory grade on MAT 220 placement test

297 Special Topics in Mathematics

R 0.5 - 6 Cr. Hrs.

Varied content offerings of special interest within the discipline, but not covered within existing courses.

Mental Health Technology (MHT)

101 Introduction to Mental Health Work

R 3 Cr. Hrs.

History, vocabulary, current concepts concerning delivery of services. Roles for workers in the field. Necessary skills and values in the helping process. Ethical issues and concerns of beginning helpers.

115 Social Case Work

3 Cr. Hrs.

Basic principles and skills for the professional helping relationship. Professional and multi-cultural issues in clinical practice. Case work problem solving model is emphasized.

Prerequisite(s): MHT 101 restricted to MHT majors

120 Chemically Dependent Women

1 Cr. Hr.

Needs and issues pertaining to chemically dependent women. Engaging women in the treatment process. Treatment techniques which foster recovery.

121 Chemically Dependent Families

1 Cr. Hr.

Effects of addiction on the family unit. Addiction's impact on family communication patterns, codependency, coping skills, and the process of family recovery.

122 Appalachian Issues in C.D. Treatment

1 Cr. Hr.

Chemical dependency treatment for Appalachian clients. Cultural influences which impede and promote treatment success.

123 Street Drug Actions

1 Cr. Hr.

Effect of street drugs on cognitive, affective and behavioral functioning as they have an impact on the clinical treatment process.

124 Issues in Recovery from Addiction

1 Cr. Hr.

Factors contributing to relapse following chemical dependency treatment. Successful approaches to aftercare programming.

126 Introduction to Substance Related Disorders

3 Cr. Hrs.

Substance abuse and dependency to harmful substances. Theories of addiction. Effects on the individual, family and society. Intervention, treatment modalities and recovery.

128 Family Dynamics of Chemical Dependency

4 Cr. Hrs.

Impact of chemical dependency on individual family members and overall family functioning, emphasizing the nature of codependency, its symptoms and treatment.

130 Treatment Techniques in Chemical Dependency

4 Cr. Hrs.

Treatment methods for alcohol/drug addictions. Individual, group, family counseling systems for residential and out-patient work.

132 Assessment & Diagnosis of Chemical Dependency

4 Cr. Hrs.

Holistic assessment and diagnosis of chemical dependency, skill development, use of and interpretation of assessment instruments. Use of current Diagnostic Statistical Manual (DSM) criteria.

134 Chemical Dependency Treatment in Correctional Settings

3 Cr. Hrs.

Effects of incarceration on behavior, attitude development, emotional life and cognitive functioning. Effective treatment techniques with incarcerated addicts.

135 A & D Treatment for African-Americans

1 Cr. Hr.

Culturally sensitive approaches to treatment. Gaining accurate background information. Obstacles to forming therapeutic relationship. Impact of advertising, crime, racism on treatment effectiveness.

136 Ethical Issues in Behavioral Health Care

3 Cr. Hrs.

Ethical responsibilities of practitioners in the human service field including chemical dependency counselor and social work assistants, covering the Federal Confidentiality Regulations, case law, codes of ethics, scope of practice, expectations of funding bodies and the demands of managed care.

137 Adolescent Substance Abuse

3 Cr. Hrs.

Assessment and treatment of adolescent substance abuse. Risk factors, prevalence, causation, interventions, resources, accompanying problems.

138 Dual Diagnosis: Substance Abuse & Mental Illness

3 Cr. Hrs.

Chemical addiction in the mentally ill client. Unique challenges, special needs, and effective treatment models for this dual diagnosed population.

139 Substance Abuse Prevention

3 Cr. Hrs.

Theories, models, historical framework and terminology. Contemporary definition of prevention for both in-school and community based strategies and curricula. Assessment of risk and protective factors. Resources, funding, research and credentialing in Ohio.

140 Child & Adolescent Mental Health

3 Cr. Hrs.

Etiology, assessment and treatment of emotional and behavioral problems of children and adolescents. Service planning and community resources.

141 Treating Potentially Dangerous People

1 Cr. Hr.

Integrative, practical, and analytical approach to understanding the self in order to understand the client's perception of oneself as the helper. Understanding one's own socialization process relative to successfully addressing clients and treating potentially violent clients.

142 Client Analysis: Preventing & Responding to Violence During Treatment

1 Cr. Hr.

An integrative, practical, and analytical approach to understanding the client and stimuli that may evoke violence.

143 Issues in Professional Ethics

R 1 Cr. Hr.

Application of ethical codes, laws and agency policies and procedures, focusing on a current issue in professional ethics in the helping professions. Review of professional ethics in relation to personal biases and opinions on the issues. Example issues include death with dignity, personal biases, religion and professional ethics, technology's application in the work place.

151 Art as Therapy I 3 Cr. Hrs.

Experiential discovery of personal creative processes using a variety of art media.

152 Art as Therapy II 3 Cr. Hrs.

Emphasizing clinical art therapy experiences with varied populations. Development of professional observation, assessment, and motivational skills.

Prerequisite(s): MHT 151

201 Interviewing & Assessment 4 Cr. Hrs.

Observing, interviewing, assessing, and report writing. Preparation for major clinical sequence. Three lecture, two lab hours per week.

Prerequisite(s): MHT 101 and ALH 103

202 Practicum in Mental Health I 5 Cr. Hrs.

Field work experience in mental health agencies. Case management, therapeutic relationships, supervised treatment planning and implementation. Case management with individual clients, group facilitation, reporting and recording. Four lecture, two lab hours per week.

Prerequisite(s): MHT 201

203 Practicum in Mental Health II 5 Cr. Hrs.

Field work experience in mental health agencies. Case management, therapeutic relationships, supervised treatment planning and implementation. Case management with individual clients, group facilitation, reporting and recording. Four lecture, sixteen practicum hours per week.

Prerequisite(s): MHT 202

204 Practicum in Mental Health III 5 Cr. Hrs.

Field work experience in mental health agencies. Case management, therapeutic relationships, supervised treatment planning and implementation. Case management with individual clients, group facilitation, reporting and recording. Four lecture, sixteen practicum hours per week.

Prerequisite(s): MHT 203

205 Psychosocial Interventions 3 Cr. Hrs.

Acquiring and applying advanced clinical interventions and treatment modalities for various client populations.

Prerequisite(s): MHT 115

206 Case Management 3 Cr. Hrs.

Philosophy, knowledge and skill components for effective case management, including training content authorized by Ohio Department of Mental Health.

209 Treatment Planning 2 Cr. Hrs.

Purpose and process of treatment planning and clinician's role. Writing measurable goals and objectives. Includes Ohio Department of Alcohol and Drug Addiction Services levels of treatment and client placement criteria.

210 Professional Licensing & Credentialing Processes 3 Cr. Hrs.

Examines a short history and current status of various licenses and other mental health and addictions related credentials. Overview of requirements, procedures, skills and knowledge base required for human service related licensure in Ohio. A special emphasis is focused on Ohio Chemical Dependency Professional licensing and certification and Ohio Counselor, Social Worker and Marriage and Family Therapist requirements.

211 Group Dynamics I 3 Cr. Hrs.

Introduction to interpersonal dynamics in groups. Awareness of group leadership skills and personal issues affecting participation. Laboratory groups promote personal growth while providing experiential awareness of phases and issues of group development. Two lecture, two lab hours per week.

Prerequisite(s): MHT 115

212 Group Dynamics II 3 Cr. Hrs.

Presentation of history and development of group work, professional ethics, curative factors, stages of group development, theories of change, effective leadership characteristics. Two lecture, two lab hours per week.

Prerequisite(s): MHT 211

213 Group Dynamics III 3 Cr. Hrs.

Opportunities to practice group facilitation; skills in process planning and critical analysis of group dynamics, roles and issues in co-facilitation. Two lecture, two lab hours per week.

Prerequisite(s): MHT 212

214 Emotional Health & Healing 3 Cr. Hrs.

Human emotions and the need for appropriate energy release; defenses and blockages of energy resulting in psychological dysfunction; models of changes; personal, professional and ethical issues in treatment.

217 Lab for MHT 211

Laboratory must be taken with MHT 211.

218 Lab for MHT 212

Laboratory must be taken with MHT 212.

219 Lab for MHT 213

Laboratory must be taken with MHT 213.

221 Activity Therapy 3 Cr. Hrs.

Theory and practice in therapeutic activities for mental health clients of all ages. Activity analysis, program and treatment planning, leadership techniques, application of the adventure based counseling model. Two lecture, two lab hours per week.

Prerequisite(s): MHT 115

226 Lab for MHT 221

Laboratory must be taken with MHT 221.

245 Mental Health & the Family 4 Cr. Hrs.

Underlying dynamics and interactional patterns in family functioning and the impact of family dysfunction on individuals. Methodologies of clinical intervention, highlighting issues and trends facing contemporary families.

Prerequisite(s): MHT 205 and ENG 112

296 Special Topics in Mental Health R 0.5 - 6 Cr. Hrs.

Opportunities to earn credit for workshops and short term courses on current topics in Mental Health and Human Services. Only nine hours earned by Special Topics may be applied toward an associate degree in Mental Health.

Marketing (MRK)

115 International Environment: Culture & Business 3 Cr. Hrs.

An exploration of the social, political, cultural and business conditions in the international arena will be presented. Social and business practices in various environments are explored. Student participation through discussion and a team project will be included. Also offered as HUM 115; students may enroll in either course but not both.

201 Marketing I 3 Cr. Hrs.

The economical and social impact of the "marketing concept" stressing a managerial approach. Environments (social, economic, legal, etc.) and their influence on consumer behavior and decisions of the marketing manager. Consumer sovereignty is stressed.

202 Marketing II 3 Cr. Hrs.

The marketing mix provides the focal point for analysis and discussion. The management process is integrated with materials on distribution, product, marketing communication, and pricing.

Prerequisite(s): MRK 201

205 Direct Marketing 3 Cr. Hrs.

The use of directing marketing continues to grow each year, as more and more organizations are employing it to cost effectively create profitable, long term customer relationships. In this course, students will learn practical tools and techniques to evoke, record, and analyze customers' behavior. The course discusses trends such as e-commerce and database marketing, as well as covering the tried-and-true approaches that have made direct marketing such as vital part of leading companies' strategies.

Prerequisite(s): MRK 201

208 Sports Marketing 3 Cr. Hrs.

An introduction to the specialized field of sports and event marketing. Develops basic knowledge and understanding of sports and event marketing and highlights areas of consumer preference, segmentation, targeting, positioning and other critical strategic issues.

Prerequisite(s): MRK 201

209 Hip-Hop Marketing: Buying & Selling Culture 3 Cr. Hrs.

Examination of the impact marketing has on hip-hop culture and the effects of hip hop on corporate America product sales to the younger generation. Exploration of the interdependent relationship between hip-hop artists and marketing.

210 Computer Applications in Marketing 3 Cr. Hrs.

Analysis, discussion, and critiquing of specific marketing problems emphasizing quantitative analysis using personal computers to relate marketing theory and the practical application of marketing concepts.

Prerequisite(s): MRK 201, MRK 202, MAT 105

215 Advertising 3 Cr. Hrs.

The course emphasizes a part of the marketing mix involving integrated marketing communications (IMC). The concepts of IMC enhance the equity of brands and show how advertising, promotion, packaging and branding strategies, point-of-purchase communications, public relations, event, and cause oriented sponsorships can affect the marketing of products, goods, services, or ideas.

Prerequisite(s): MRK 201

225 Sales Fundamentals 3 Cr. Hrs.

Basic principles of sales and development of techniques for satisfying consumer needs through thoughtful personal selling. Direct participation by the student in simulated sales situations.

226 Sales Management 3 Cr. Hrs.

Discussion, case studies and role playing will be utilized to study the nature and scope of sales management and selection and training processes.

Prerequisite(s): MRK 225

230 International Marketing 3 Cr. Hrs.

Structure, organization, policies and constraints of multi-national business organizations and international trade in general with emphasis on the effect of environmental differences on marketing.

Prerequisite(s): MRK 202

235 Marketing Research 3 Cr. Hrs.

Principles of marketing research as they apply to the decision making processes in management and marketing and the relationships between these processes.

Prerequisite(s): MRK 202

236 Consumer Behavior 3 Cr. Hrs.

For companies to compete effectively in today's competitive marketplace, managers and marketers must better understand consumers and their behaviors. This course gives students the tools to understand and analyze how, and why, consumers make purchase decisions. The student will be introduced to concepts of category of influences on consumer behavior, the consumer decision process, and why he or she, personally, makes purchase decisions.

Prerequisite(s): MRK 201

238 Industrial Marketing 3 Cr. Hrs.

Distinctions between industrial and consumer demand; general characteristics of industrial markets that affect planning by marketers; relationships among variables that influence buyer behavior, and adaptation of the marketing mix elements to reach the industrial customer.

Prerequisite(s): MRK 202

245 Principles of Retailing 3 Cr. Hrs.

Functions and concepts for the retail organization. Development and implementation of policies and procedures in planning, pricing, display, layout, buying and services from a mid-management perspective. A consumer centered approach to examining problems of various types and sizes of stores.

Prerequisite(s): MRK 105 or MRK 201

246 Fashion Merchandising 3 Cr. Hrs.

The social, economic and psychological factors influencing fashion and of concern to the retail assistant buyer or fashion coordinator. Terminology and basic elements of fashion, the environment of fashion and fashion leaders and cycles.

Prerequisite(s): MRK 245

247 Retail Buying & Merchandising 3 Cr. Hrs.

The functions of buying and selling to provide consumer satisfaction along with retail mathematics, stock turnover, budgeting, promotion, inventory evaluation, merchandising strategies, cost analysis and control.

Prerequisite(s): MRK 245

265 Introduction to E-Commerce 3 Cr. Hrs.

Electronic commerce basics, including a definition of e-commerce, an explanation of how e-commerce differs from traditional commerce; also includes the history, development and impact of e-commerce. The global impact of e-commerce, the relationship of e-commerce to business practices, marketing, legal issues, accounting and e-commerce technology are also addressed.

270 Marketing Internship R 1 - 9 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

295 Marketing Seminar 3 Cr. Hrs.

Cases and readings emphasizing current marketing principles and the environment of the firm. Marketing functions as part of a total marketing system which responds in degree to consumer's changing needs.

297 Special Topics in Marketing R 0.5 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (such as TV and newspaper) as well as special interest topics within the discipline. Only six credit hours earned by Special Topics courses can apply toward an associate degree in Business.

Prerequisite(s): Permission of instructor

Music (MUS)**104 MIDI Sequencing 3 Cr. Hrs.**

Musical Instrument Digital Interface (MIDI) terms and concepts; hardware and software requirements and setup; inputting of sequencing information in various formats; editing of basic parameters.

105 Introduction to Music 3 Cr. Hrs.

Fundamentals of music theory including notation, rhythm, scales, intervals, and chords.

106 Vocal Diction I 2 Cr. Hrs.

Italian and English diction will be studied with emphasis on clarity, expressiveness, regard for correct pronunciation, and sound production as applied to singing and reading.

Prerequisite(s): Music major or permission of instructor

107 Vocal Diction II 2 Cr. Hrs.

German diction will be studied with emphasis on the fundamentals of phonetics and sound production as applied to singing and reading. English will be continued.

Prerequisite(s): MUS 106

108 Vocal Diction III 2 Cr. Hrs.

French diction will be studied with emphasis on the fundamentals of phonetics and sound production as applied to singing and reading. German will be continued.

Prerequisite(s): MUS 107

109 Using Finale 1 Cr. Hr.

A series of tutorial projects covering note entry methods, text entry, functions of the main tool palette, basic plug-ins, layout issues, and MIDI document import and export.

Prerequisite(s): Ability to locate notes on a keyboard recommended

111 Music Theory I 3 Cr. Hrs.

First level university parallel course. Notation, scales, modes, intervals, key, tonality, anatomy and organization of melody, harmonic anatomy, voice leading, ranges, transpositions.

Prerequisite(s): MUS 105

112 Music Theory II 3 Cr. Hrs.

Harmonic progression, modulation, resolution, harmonic function of seventh chords, history, types, inversions of secondary dominants.

Prerequisite(s): MUS 111

113 Music Theory III 3 Cr. Hrs.

Form-design-analysis: Binary, rounded binary/incipient ternary, ternary as surveyed from text, workbook, and anthology. Song form with trio, minuet-trio-minuet, suite, bar form, stollen, abgesang, lied. Secondary dominants applied.

Prerequisite(s): MUS 112

114 Women's Ensemble R 1 Cr. Hr.

The women's ensemble is for vocalists with experience in choral singing. This ensemble sings treble literature from all musical periods. This is a select group requiring appearance in public recital each quarter.

Prerequisite(s): Audition, permission of instructor

115 Music Appreciation 3 Cr. Hrs.

Basic parameters of music through a survey from Gregorian Chant to jazz and current rock styles focusing on melody, rhythm, harmony, and form.

116 Music Major Piano Class I 1 Cr. Hr.

Instruction in correct piano playing techniques. One lecture, one lab hour per week.

Prerequisite(s): MUS 105

117 Music Major Piano Class II 1 Cr. Hr.

Instruction in correct piano playing techniques and harmonizations. Appropriate piano repertoire is also studied. One lecture, one lab hour per week.

Prerequisite(s): MUS 116

118 Music Major Piano Class III**1 Cr. Hr.**

Instruction in correct piano playing techniques, major and minor scales, chords. Appropriate piano repertoire is also studied. One lecture, one lab hour per week.

Prerequisite(s): MUS 117

119 Men's Ensemble R 1 Cr. Hr.

The men's ensemble is for vocalists with experience in choral singing. This ensemble sings literature written for male voices from all musical periods. This is a select group requiring appearance in public recital each quarter.

Prerequisite(s): Audition, permission of instructor

120 African-American Music/Gospel Choir R 1 Cr. Hr.

The performance and presentation of mixed choral literature from the African-American Spiritual and Gospel music tradition. The choir will present at least one concert per quarter.

Prerequisite(s): Audition, permission of instructor

121 Piano Class I 3 Cr. Hrs.

Correct techniques and basic music reading skills. Simple pieces and chords. No piano playing or musical experience required.

122 Piano Class II 3 Cr. Hrs.

Correct piano playing techniques. Selected piano literature, sight reading, all major scales and ensemble playing is stressed.

Prerequisite(s): MUS 121 or permission of instructor

123 Piano Class III 3 Cr. Hrs.

Correct piano playing techniques. Selected piano literature, sight reading, all major scales and ensemble playing is stressed.

Prerequisite(s): MUS 122 or permission of instructor

124 Handbell Choir Conducting 1 Cr. Hr.

Major factors associated with direction of handbell ensembles, emphasizing organization of choirs, performance pedagogy, conducting techniques, repertoire selection, performance aspects, and care of equipment.

Prerequisite(s): Permission of instructor

125 History of Rock Music 3 Cr. Hrs.

The reasons and conditions under which rock music took root; the personalities, events and music that shaped rock, and the conditions under which rock music continues to flourish today. An audio cassette class with periodic written exams.

126 Introduction to Sight Singing, Dictation, Ear Training 3 Cr. Hrs.

Fundamentals of sight singing, dictation, ear training including hearing and notating rhythm and melody.

127 Chamber Choir R 1 Cr. Hr.

The rehearsal, performance, and presentation of SATB (soprano, alto, tenor, bass) mixed choral music, representing all periods and styles. This course is for experienced choral singers. The choir will present at least one concert per quarter.

Prerequisite(s): Audition, permission of instructor

131 Survey of Musical Styles I 3 Cr. Hrs.

The historical styles of Western music in chronological sequence through analysis of various musical compositions and musical forms from the Medieval, Renaissance, and Baroque eras.

132 Survey of Musical Styles II 3 Cr. Hrs.

The historical styles of Western music are explored in chronological sequence through an analysis of various musical compositions and musical forms from the Classical and early Romantic eras.

Prerequisite(s): MUS 131

133 Survey of Musical Styles III 3 Cr. Hrs.

The historical styles of Western music are explored in chronological sequence through an analysis of various musical compositions and musical forms from the late Romantic and Modern eras.

Prerequisite(s): MUS 132

135 Percussion Methods 1 Cr. Hr.

Students learn to identify and play the most common percussion instruments; read any percussion parts and know what substitutions to use if the correct instruments are not available. One lecture, two lab hours per week.

Prerequisite(s): MUS major or permission of instructor

136 Choral Conducting 2 Cr. Hrs.

Fundamentals of direction of choral groups with emphasis on basic baton technique, cueing meters, vocal exercises, and conducting terminology.

Prerequisite(s): MUS 111 or permission of instructor

139 Music Technology for Music Majors 1 Cr. Hr.

Introduction to the use and applications of computer based resources including Internet sites that support Music department course curricula: MacGamut software; Auralia, Musition and Musica Practica software; Cakewalk Home Studio 2004 with MIDI sequencing and audio editing; and Finale 2003 and Finale Workbook.

141 Singing & Dictation I 1 Cr. Hr.

Course units are divided among rhythm, harmony and melody. Vocal and aural skills are applied to meter and modality/tonality. One lecture, two lab hours per week.

Prerequisite(s): MUS 126

142 Singing & Dictation II 1 Cr. Hr.

Two voice counterpoint, dyads, triads, seventh chords, four-voice harmony, structure of harmonic vocabulary. One lecture, two lab hours per week.

Prerequisite(s): MUS 141

143 Singing & Dictation III 1 Cr. Hr.

Chord usage and recognition, intervals/compound intervals, accompanied melody, four-voice soprano and bass factors, harmonic structure, metrical quarter beat values. One lecture, two lab hours per week.

Prerequisite(s): MUS 142

145 Voice Class 3 Cr. Hrs.

Fundamentals of vocal production, song literature, interpretation, and performance skills are studied, either as a terminal course or to prepare students for possible private applied study. Combines lecture with group and individual singing.

148 History of Music in Worship I 3 Cr. Hrs.

Chronological survey, with documentation both written and aural, of music in the Christian church from the first century to the year 1400.

149 History of Music in Worship II 3 Cr. Hrs.

Historical styles of music within the Christian church covering written and aural documentation 1400 to 1800 A.D.

Prerequisite(s): MUS 148

150 History of Music in Worship III 3 Cr. Hrs.

Analysis of changing musical styles incorporated into the Christian church from 1800 to the present.

Prerequisite(s): MUS 149

151 Guitar Class I R 1 Cr. Hr.

Fundamental study of guitar playing techniques. Students must provide their own instruments. Electric guitars are not appropriate.

152 Guitar Class II R 1 Cr. Hr.

Fundamental study of guitar playing including melodic line playing, scales, chords and various rhythmic patterns.

Prerequisite(s): MUS 151

153 Guitar Class III 1 Cr. Hr.

Fundamental study of guitar playing including more advanced melodic line playing, bar chords, various scale patterns and ensemble playing.

Prerequisite(s): MUS 152 or permission of instructor

154 Jazz Combo R 1 Cr. Hr.

Open to college and community musicians who develop small jazz group performance skills. Concerts and appearances are scheduled during the academic year. One lecture, two lab hours per week.

Prerequisite(s): Audition

155 Sinclair Singers R 1 Cr. Hr.

Sinclair's show choir, this vocal and instrumental ensemble combines singing with movement, concentrating on the best of musical theater, comedy, jazz and popular music. The singers make many appearances on and off campus during the year. One lecture, two lab hours per week.

Prerequisite(s): Audition

158 Jazz Ensemble R 1 Cr. Hr.

Open to college and community musicians who present jazz ensemble performances. Concerts and appearances are scheduled during the academic year. One lecture, two lab hours per week.

Prerequisite(s): Audition

163 Vocal Coaching R 1 Cr. Hr.

For musical theatre vocalists/students who want to improve vocal skills. Emphasis is on the development of the singing voice in musical theatre repertoire. Students work in a master class setting. This is not a beginning voice class. Memorization of at least three songs is required.

Prerequisite(s): Audition, permission of instructor

164 Vocal Styling R 1 Cr. Hr.

For music and theatre students who have had some experience in performing and have had vocal training. Emphasis is on the development of free-flow movement, characterizations, and mood of songs from musicals. Expression, phrasing, interpretation and performance of at least three musical theatre songs. One lecture, one lab hour per week.

Prerequisite(s): Audition, permission of instructor

166 Chorale R 1 Cr. Hr.

Select mixed chamber choir specializing in performance of vocal music of several stylistic periods. School and public performances required. One lecture, two lab hours per week.

Prerequisite(s): Audition

167 Applied Music - Jazz Piano R 1 - 4 Cr. Hrs.**169 Applied Music - Organ** R 1 - 4 Cr. Hrs.**170 Applied Music - Piano** R 1 - 4 Cr. Hrs.**171 Applied Music - Voice** R 1 - 4 Cr. Hrs.**172 Applied Music - Percussion** R 1 - 4 Cr. Hrs.**173 Applied Music - Violin** R 1 - 4 Cr. Hrs.**174 Applied Music - Viola** R 1 - 4 Cr. Hrs.**175 Applied Music - Cello** R 1 - 4 Cr. Hrs.**176 Applied Music - String Bass** R 1 - 4 Cr. Hrs.**177 Applied Music - Flute** R 1 - 4 Cr. Hrs.**178 Applied Music - Clarinet** R 1 - 4 Cr. Hrs.**179 Applied Music - Saxophone** R 1 - 4 Cr. Hrs.**180 Applied Music - Oboe** R 1 - 4 Cr. Hrs.**181 Applied Music - Bassoon** R 1 - 4 Cr. Hrs.**182 Applied Music - Trumpet** R 1 - 4 Cr. Hrs.**183 Applied Music - Trombone** R 1 - 4 Cr. Hrs.**184 Applied Music - French Horn** R 1 - 4 Cr. Hrs.**185 Applied Music - Baritone Horn** R 1 - 4 Cr. Hrs.**186 Applied Music - Tuba** R 1 - 4 Cr. Hrs.**187 Applied Music - Guitar** R 1 - 4 Cr. Hrs.**188 Applied Music - Electric Bass** R 1 - 4 Cr. Hrs.**189 Applied Music - Jazz Drumming** R 1 - 4 Cr. Hrs.**190 Applied Music - Classical Guitar** R 1 - 4 Cr. Hrs.**192 Applied Music - Harpsichord** R 1 - 4 Cr. Hrs.**194 Wind Symphony** R 1 Cr. Hr.

Concentration on instrumental problems and techniques. Development of wind ensemble repertoire. School and public performance will be a major part of the course activities. One lecture, two lab hours per week.

Prerequisite(s): Audition

195 Concert Band R 1 Cr. Hr.

Concentration on instrumental problems and techniques. Development of symphonic band repertoire. School and public performance will be a major part of the course activities. One lecture, two lab hours per week.

Prerequisite(s): Audition

206 Voice Pedagogy I 1 Cr. Hr.

Historical and scientific background of voice, vocal mechanism, approaches to the art of teaching. Review and recommendation of materials; supervised practice teaching within the class. One lecture, one lab hour per week.

Prerequisite(s): Music major or permission of instructor.

207 Voice Pedagogy II 1 Cr. Hr.

A continuation of MUS 206. One lecture, one lab hour per week.

Prerequisite(s): MUS 206

208 Voice Pedagogy III 1 Cr. Hr.

A continuation of MUS 207. One lecture, one lab hour per week.

Prerequisite(s): MUS 207

211 Music Theory IV 3 Cr. Hrs.

Second level university parallel course. Composition, continuous variations, theme and variations, borrowed chords, neapolitan and augmented sixth chords, extended and altered dominants, survey of chromaticism.

Prerequisite(s): MUS 113

212 Music Theory V 3 Cr. Hrs.

Composition, sonata allegro, rondo, late Renaissance polyphony, two-voice eighteenth century counterpoint, fugue.

Prerequisite(s): MUS 211

213 Music Theory VI 3 Cr. Hrs.

Composition, compositional devices of the late nineteenth and early twentieth century, compositional devices of the contemporary period, modern twelve-tone set techniques.

Prerequisite(s): MUS 212

216 Music Major Piano Class IV 1 Cr. Hr.

Music students are instructed in correct piano playing techniques, harmonization, improvisation, and accompanying. Appropriate piano repertoire is also studied. One lecture, one lab hour per week.

Prerequisite(s): MUS 118

217 Music Major Piano Class V 1 Cr. Hr.

Continuation of MUS 216.

Prerequisite(s): MUS 216

218 Music Major Piano Class VI 1 Cr. Hr.

Continuation of MUS 217. One lecture, one lab hour per week.

Prerequisite(s): MUS 217

221 Sight Singing for Singers I 1 Cr. Hr.

Developing and understanding of solfeggio through the practice of singing exercises utilizing the syllables of Solemnization to recognize the notes, rhythms and intervals important to basic sight reading skills. One lecture, one lab hour per week.

Prerequisite(s): MUS 105 and permission of instructor

225 Sinclair Concert Handbell Choir R 1 Cr. Hr.

Study and performance of handbell ensemble repertoire, ranging from classical to novelty, sacred to secular, and original to transcription, as well as aspects of the preparation of a program for performance. One lecture, one lab hour per week.

Prerequisite(s): Audition

226 Brass Methods I 1 Cr. Hr.

Students are instructed in the art of playing and teaching the following brass instruments: trumpet, French horn, trombone, baritone horn or tuba. One lecture, two lab hours per week.

Prerequisite(s): Music major or permission of instructor

227 Brass Methods II 1 Cr. Hr.

Continuation of MUS 226. One lecture, two lab hours per week.

Prerequisite(s): MUS 226

229 Conducting Fundamentals 2 Cr. Hrs.

Fundamentals of conducting music ensembles with emphasis on basic baton technique, meters, cueing, addressing different styles, conducting terminology and score reading.

Prerequisite(s): MUS 211 counselor's signature

236 Jazz Improvisation I 2 Cr. Hrs.

Students will learn the art of spontaneously creating music (extempore) while performing. One lecture, one lab hour per week.

Prerequisite(s): MUS 111

237 Jazz Improvisation II 2 Cr. Hrs.

Students will learn the art of spontaneously creating music (extempore) while performing.

Prerequisite(s): MUS 236

241 Singing & Dictation IV 1 Cr. Hr.

Chromatic pitches, augmented and diminished intervals, seventh chords, harmonic structure and function, non-harmonic tones, modulation, secondary dominants and diminished/minor sevenths and diminished/diminished sevenths. One lecture, two lab hours per week.

Prerequisite(s): MUS 143

242 Singing & Dictation V 1 Cr. Hr.

Borrowed chords, neapolitan and augmented sixth chords, extended and altered dominants, ninth, eleventh-thirteenth structures and inversions, survey of chromaticism. One lecture, two lab hours per week.

Prerequisite(s): MUS 241

243 Singing & Dictation VI 1 Cr. Hr.

Nontertian harmony, two-voice contrapuntal music, aural recognition of simultaneous events, improvisation, modern twelve-tone set aural recognition and application. One lecture, two lab hours per week.

Prerequisite(s): MUS 242

245 Church Service Playing I 2 Cr. Hrs.

Ecumenical survey of church services and the music/worship orders involved in a wide variety of settings, ranging from free and unstructured to highly liturgical, and involving student participation in each session.

Prerequisite(s): Audition

246 Church Service Playing II 2 Cr. Hrs.

Hands-on experience with additional church services, such as charismatic, Episcopal, and gospel, with keyboard skills such as improvisation and ensemble playing.

Prerequisite(s): MUS 245

270 Music Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

Prerequisite(s): Departmental permission

275 Church Music Practicum 2 Cr. Hrs.

Fundamentals of worship, musician-clergy relationships, hymn festivals, formation of youth choirs, preparation of cantatas, seminar availabilities, and budgeting.

Prerequisite(s): Permission of chairperson

295 Music Practicum R 1 - 3 Cr. Hrs.

Music major may receive credit for practical experiences such as performing in a musical, opera, musical organization, solo recital, etc. Arrangements must be made through the department chairperson.

Prerequisite(s): Permission of chairperson

296 Classical Guitar Ensemble R 1 Cr. Hr.

The performance and study of selected Classical Guitar Ensemble literature. The literature covered will determine the size and performance level of the class. Public performance. One lecture, one lab hour per week.

Prerequisite(s): Audition

298 Performance Class R 1 Cr. Hr.

Performance repertoire from intermediate to advanced levels. Designed to anticipate and alleviate the public performance problems. Emphasizing all aspects of technique and music including sight reading, memorization and control of nervousness (Piano-Section 01, Voice-Section 02)

Prerequisite(s): Permission of chairperson

299 Applied Music Practicum R 4 Cr. Hrs.

Private instruction one-hour per week on selected musical instrument. Recitals, board examinations, and registration in degree program not required.

Prerequisite(s): Permission of chairperson

Nursing (NSG)

120 Human Response 3 Cr. Hrs.

Discusses scope and practice of nursing profession and philosophy/framework of the Nursing program at Sinclair. Introduces human response, nursing process, critical thinking, decision making and collaborative judgment, and management principles. Provides a foundation in therapeutic communication, documentation, teaching/learning, and health promotion/disease prevention.

Prerequisite(s): BIO 141 and PSY 119 and ENG 111 and COM 206 and ALH 103. Acceptance in Nursing program

121 Identifying Responses Through Assessment 3 Cr. Hrs.

Uses assessment techniques to identify normal/abnormal human responses to stressors. Applies diagnostic reasoning to assessment data to determine impact of stressors on the individual and family and the level of preventive care necessary. Two lecture, three lab hours per week.

Prerequisite(s): BIO 141 and PSY 119 and ENG 111 and COM 206 and ALH 103. Acceptance in Nursing program

122 Promoting Healthy Responses to Physiological Stressors 8 Cr. Hrs.

Introduces the concept of general responses to physiological and environmental stressors. Analyzes responses to changes in the immune mechanism, inflammation, wound healing, fluid and electrolytes, and cancer. Includes interventions to support or correct physiologic responses. Compares principles and issues of care in settings across the health care continuum. Four lecture, twelve clinical hours per week.

Prerequisite(s): NSG 120 and NSG 121 and BIO 141 and BIO 142 and BIO 205 and MAT 109. Acceptance in Nursing program

123 Promoting Healthy Responses Through Psychomotor Interventions 3 Cr. Hrs.

Introduces a base of common nursing interventions that assist individuals responding to physiological stressors. Integrates critical thinking, nursing process, principles from nursing and the sciences, and resource management into the utilization of technical skills to provide a foundation for effective practice in settings across the health care continuum. Two lecture, three lab hours per week.

Prerequisite(s): NSG 120 and NSG 121 and BIO 141 and BIO 142 and BIO 205 and MAT 109. Acceptance in Nursing program

132 Transition to Registered Nursing 4 Cr. Hrs.

The Ohio Nursing Articulation Model transition course is designed to enable the student to explore integrative concepts in Nursing and to assist the student in the transition from licensed practical nurse to registered nurse. Students refine and update previous learning in addition to identifying goals for a successful transition into the registered nursing program. Combined with classroom and nursing laboratory experiences, the student learns through the application of concepts. The student will demonstrate the ability to solve problems through the use of the nursing process with a focus on client assessment and to communicate more effectively. This course meets 16 hours per week for one-half quarter.

Prerequisite(s): BIO 211 and COM 206 and ENG 111 and PSY 119

133 Transition to Registered Nursing II 6 Cr. Hrs.

Continues to assist the student in the transition from LPN to second year ADN student. Focuses on Sinclair nursing philosophy and conceptual framework. Analyzes responses to stressors of the internal environment, protective mechanisms and cellular growth. Integrates human response, health promotion/disease prevention, critical thinking, nursing process and resource management into utilization of common nursing interventions. This course meets 24 hours per week for one-half quarter.

Prerequisite(s): NSG 132

220 Promoting Healthy Responses to Specific Stressors I 8 Cr. Hrs.

Analyzes specific stressors affecting physical integrity/infectious disease, perioperative experience, nutrition, bowel elimination, and physical regulation/metabolic function. Begins application of decision making, care management, resources management, and critical pathways across the health care continuum. Four lecture, twelve clinical hours per week.

Prerequisite(s): NSG 122 and NSG 123 and BIO 143

221 Promoting Healthy Responses to Psychosocial Stressors 4 Cr. Hrs.

Discusses nursing management based on responses to psychosocial stressors. Includes interventions based on mental health concepts that assist individuals to achieve a balance of emotional health at any point along the health care continuum. This course meets 16 hours per week for one-half of the quarter.

Prerequisite(s): NSG 220 and PSY 208 and ALH 219

222 Promoting Healthy Responses to Specific Stressors II 4 Cr. Hrs.

Analyzes human responses to specific stressors affecting circulation and oxygenation. Applies nursing process, diagnostic reasoning, and collaborative judgment to multidisciplinary care in a variety of settings across the health care continuum. This course meets 16 hours per week for one-half of the quarter.

Prerequisite(s): NSG 220 and PSY 208 and ALH 219

223 Promoting Healthy Responses in Women 4 Cr. Hrs.

Analyzes responses of the childbearing family during the maternity cycle. Utilizes the nursing process to promote and maintain women's health and provide care to women with interferences in reproductive health. This course meets 16 hours per week for one-half of the quarter.

Prerequisite(s): ALH 104 and NSG 221 and NSG 222

224 Promoting Healthy Responses to Specific Stressors III 4 Cr. Hrs.

Analyzes human responses to specific stressors affecting urinary elimination, moving (musculo-skeletal), sensory, and neurological integrative functions. Applies nursing process, diagnostic reasoning, and collaborative judgment to participate in multidisciplinary care in a variety of settings across the health care continuum. This course meets 16 hours per week for one-half of the quarter.

Prerequisite(s): ALH 104 and NSG 221 and NSG 222

225 Promoting Healthy Responses in the Child & Family 4 Cr. Hrs.

Uses nursing process to identify child/family responses to hospitalization and illness. Analyzes responses to stressors affecting oxygenation, neuro-cognitive function, circulation, movement, or causing trauma. Adapts interventions to developmental needs of child. Includes primary care and anticipatory guidance to prevent illness and injury. This course meets 16 hours per week for one-half of the quarter.

Prerequisite(s): NSG 223 and NSG 224 and ENG 112

226 Promoting Healthy Responses to Interrelated Pathophysiological Stressors 4 Cr. Hrs.

Applies critical thinking to utilize the theory and skills necessary to care for patient/families responding to life threatening complex stressors requiring continuous monitoring and interventions. This course meets 16 hours per week for one-half of the quarter.

Prerequisite(s): NSG 223 and NSG 224 and ENG 112

228 Advanced Physical Assessment 4 Cr. Hrs.

Enhances the nurse's skill in collecting and organizing data, performing basic and advanced physical assessment skills by physiological systems and documenting the information. Reviews signs/symptoms particular to each system in regard to normal/abnormal functions. Includes classroom instruction and college lab experience.

230 Directed Nursing Practice 7 Cr. Hrs.

Moves the individual from Nursing student to beginning associate degree Nurse through a directed nursing practice. Emphasizes professional development, nurse's role in health promotion and disease prevention, management of care for a group of patients, decision making, interpersonal relationships, responsibility and accountability. Three lecture, twenty clinical hours per week.

Prerequisite(s): NSG 225 and NSG 226 and portfolio elective

236 Intravenous Therapy 2 Cr. Hrs.

Classroom instruction and college lab experience in: fluid and electrolytes, legal aspects, indications for intravenous therapy, central venous pressure monitoring, hyperalimentation, blood product infusion, "push" medications, infusion pumps, piggybacks, and heparin locks.

238 Basic EKG Interpretation 2 Cr. Hrs.

Basic techniques of interpreting and analyzing the electrocardiogram. Reviews electrode placement, electrophysiology, cardiac monitoring, EKG format, and assessment of tachycardia, bradycardia, fibrillation, premature beat, and conduction disturbances.

240 Advanced EKG Interpretation R 1.5 Cr. Hrs.

An analysis of 12 lead EKG, recognition of injury and infarction patterns, in-depth examination and discussion of arrhythmias and conduction defects. Problem solving sessions and opportunities to study and interpret EKG tracings.

248 Concepts in Community Nursing 3 Cr. Hrs.

Actual or potential health problems within a community. Concepts related to nursing in the community. High risk individuals, families, and communities.

Prerequisite(s): RN or nursing students who have completed 50% of their Nursing courses.

249 Women's Health Issues 3 Cr. Hrs.

Review of anatomical, physiological, pathological, and technological obstetrical/gynecological information. Women as partners in personal health care as well as women's desire to understand and control their bodies. Contemporary issues; gynecological cancer; death and dying; problems of assault and battery; sexual dysfunction; and pre-menstrual tension syndromes.

250 Traumatic Brain Injury 1 Cr. Hr.

Physiological and behavioral changes from brain injury, including comparison of assessment and treatment of patients with mild to severe brain injury during the immediate post trauma phase with focus on maintaining adequate cerebral perfusion and restoring neuronal function. Case presentations and discussions will be divided equally into acute care and rehabilitation. Multidisciplinary goal-directed plan of care will be individualized based on severity of brain injury. Resources for patient and family will be addressed.

251 Assessment & Management of Neuromuscular Movement Disorders 1 Cr. Hr.

Pathophysiology and assessment of common neurological conditions (Parkinson's Disease, Multiple Sclerosis, Amyotrophic Lateral Sclerosis, and Spasticity in Stroke and other Movement Disorders). Designed to increase the neuro assessment competency of nurses, hands-on practice in comprehensive neurological assessment will be incorporated in the workshop. Group discussion will focus on the pivotal role of the nurse in the collaborative management plans.

252 Stroke Management Continuum: Prevention, Acute Care & Rehabilitation 1 Cr. Hr.

This course will review the subtypes of stroke, pathophysiology of cerebrovascular disease that can predispose to stroke, team management and the continuum of care. Presentation and discussions will encompass assessment of risk, primary prevention, early recognition of "brain attack" and transport of the patient to an acute stroke care facility for evaluation and treatment of ischemic versus hemorrhagic stroke. Major emphasis will be placed on public health education initiatives for prevention and awareness of the emergency nature of acute ischemic attack. Update on clinical management by the stroke team will focus on the recommended guidelines from coalition of stroke organizations. Application of the nursing process in stroke care from acute to subacute transitional setting, and rehabilitation in a long term care facility or home will address current evidence based practice and secondary prevention.

258 Strategies & Techniques for Test Taking 1 Cr. Hr.

This course is designed to assist learners in the AD Nursing program to identify priorities in learning and to focus study time to maximize individual test performance. Learners will be introduced to strategies and techniques of test taking. Testing situations are built on actual clinical nursing experience. Techniques learned will help improve thinking and discrimination skills to enhance test performance.

Prerequisite(s): NSG major

260 Surgical Nursing 4 Cr. Hrs.

Provides an introduction to intraoperative nursing. Discusses the basic technical, communication, professional, and critical thinking skills required to perform the role of the circulating or scrub nurse in an operating room setting. Three lecture and two lab hours per week.

Prerequisite(s): NSG 224 or current RN license

281 RN Refresher 12 Cr. Hrs.

This course has been developed to update the registered nurse's knowledge and clinical skills which are required in the delivery of professional nursing care in today's health care settings. The theoretical portion concentrates on changes in pathophysiological status, diagnostic workup programs, treatment and pharmacological modalities, and nursing interventions guided by the nursing process. The clinical portion provides learning experiences in acute care, long term care, and/or home health care settings. The evolving role of the nurse is emphasized. Six lecture, twelve clinical hours per week.

291 Drug Therapy Update I R 1 Cr. Hr.

An update on the actions, side effects, interactions and nursing implications of selected topics of drug therapy. Topics presented change each quarter.

292 Drug Therapy Update II 1 Cr. Hr.

Review and overview of the more widely used drugs in the nursing/medical management of major diseases and IV fluids. Participants will review and update their knowledge regarding intended actions, side effects, interactions, and nursing applications.

293 Drug Update: Cardiovascular Drugs 1 Cr. Hr.

General principles of cardiovascular function and conventional drug therapy for common disorders; primarily intended as an update and review for registered nurses, but may be of interest to respiratory therapists and Nursing students.

294 Drug Update: Autonomic & Psychotropic Drugs 1 Cr. Hr.

Pharmacological principles of drugs that act on the autonomic nervous system and those used to manage various psychiatric conditions, including anxiolytics, antidepressants, and antipsychotics. This course is primarily intended as an update and review for registered nurses, but may be of interest to Nursing students and various allied health professionals.

295 Drug Update: Drugs for Pain Management 1 Cr. Hr.

Pharmacological principles of drugs for acute and chronic pain, including conventional non-opioid and opioid analgesics, as well as adjunctive agents such as anxiolytics, antidepressants, glucocorticoids and local anesthetics. This course is primarily intended as an update and review for registered nurses, but may be of interest to respiratory therapists and Nursing students.

296 Drug Update: Endocrine Drugs 1 Cr. Hr.

Pharmacological principles of drugs that mimic or influence thyroid, pancreatic and ovarian function. This course is primarily intended as an update and review for registered nurses but may be of interest to Nursing students and various allied health professionals.

Prerequisite(s): Health care professional or current student in health care

297 Special Topics in Nursing R 0.5 - 6 Cr. Hrs.

Discussion of a wide variety of topics related to current health practices. Topics are offered throughout the academic year for varying lengths of time. Topics are selected by needs assessment, health care facility requests, and current health care literature. Topics address three areas of professional development: personal, skills development, and managerial. These areas are appropriate for the novice-to-expert health care provider.

Occupational Therapy Assistant (OTA)**101 Introduction to Occupational Therapy Assistant** 3 Cr. Hrs.

History, philosophy, ethics and definitions of occupational therapy; overview of occupational therapy practice areas; differences between occupational therapists and occupational therapy assistants; functions of professional and regulatory agencies; exploration of learning experiences within the OTA problem based curriculum. Two lecture, two lab (OTA 141) hours per week.

104 Functional Muscles 1 Cr. Hr.

Functional anatomy of musculoskeletal systems. Analysis of major joint and muscle groups involved in daily living tasks such as dressing, bathing, grooming, eating, cooking and housekeeping.

Prerequisite(s): BIO 141 or BIO 107

105 Functional Nervous System 1 Cr. Hr.

Functional anatomy of neurological systems. Analysis of central and peripheral nervous systems involved in daily living tasks such as dressing, bathing, grooming, eating, cooking and housekeeping.

Prerequisite(s): OTA 104 and OTA 132

131 Therapeutic Self 9 Cr. Hrs.

Development of the self as an effective therapeutic tool, including exploration of values, personal and cultural attitudes, sensitivity to cultural differences, group process, and ethical decision making, safety issues relating to laboratory and clinical experiences. Introduction to a community setting involving structured observations, documentation of observations with weekly verbal reports to peers. Five lecture, six lab and three clinical hours per week.

Prerequisite(s): OTA 101 and admission to program

132 The Nature of Being Human 9 Cr. Hrs.

A holistic view of normal development as related to areas of occupation, performance skills, performance patterns, activity demands, and client factors, including the influence of culture and society. Continued experience in a community setting involving structured observations relating to developmental issues; documentation of observations with weekly verbal report to peers. Five lecture, six lab and five clinical hours per week.

Prerequisite(s): OTA 131

133 The Dysfunctional Human 9 Cr. Hrs.

The screening and evaluation of occupational performance from conception to senescence within the cultural context of family and society. Includes the use of occupation for the purpose of assessment,

specified screening tools, assessments, skilled observation, checklists, histories, interviews with the client/family/significant others, and consultations with other professionals. Continued experience in a community setting involving structured observations relating to dysfunction in areas of occupation; documentation of observations with weekly verbal report to peers. Five lecture, six lab and seven clinical hours per week.

Prerequisite(s): OTA 132

141 Lab for OTA 101

Laboratory must be taken with OTA 101.

151 Lab for OTA 131

Laboratory must be taken with OTA 131.

152 Lab for OTA 132

Laboratory must be taken with OTA 132.

153 Lab for OTA 133

Laboratory must be taken with OTA 133.

160 Learning Communities for OTA 1 Cr. Hr.

Understanding learning styles and the development of learning methods which facilitate success within the OTA program including developing learning communities.

Prerequisite(s): Restricted to majors

161 Clinical for OTA 131

Clinical must be taken with OTA 131.

162 Clinical for OTA 132

Clinical must be taken with OTA 132.

163 Clinical for OTA 133

Clinical must be taken with OTA 133.

210 Clinical Practicum I R 2 Cr. Hrs.

Elective clinical experience to provide expanded opportunities to interact with a variety of diagnosis and clinical settings. One lecture, eight clinical hours per week.

Prerequisite(s): Signature of department chairperson

220 Clinical Affiliation I 3 Cr. Hrs.

First of two eight-week assignments of advanced clinical experience under the supervision of a licensed occupational therapist or certified occupational therapy assistant which must be successfully completed before the student is eligible for certification examination. Forty contact hours per week in a clinical setting.

Prerequisite(s): Signature of department chairperson

221 Clinical Affiliation II 3 Cr. Hrs.

Advanced clinical experience under the supervision of a licensed occupational therapist or certified occupational therapy assistant which must be successfully completed before the student is eligible for certification examination. Forty contact hours per week in a clinical setting.

Prerequisite(s): OTA 220

231 Treatment Issues I 9 Cr. Hrs.

Focus on implementation of treatment to increase levels of independence in areas of occupation; includes frames of reference and models of practice; documentation, role of occupational therapy assistants in a variety of settings and practice areas; establishing therapeutic relationships with clients and families, therapists, health care professionals; mentorship in community settings. Five lecture, six lab, three clinical and seven practicum hours per week.

Prerequisite(s): OTA 133

232 Treatment Issues II 9 Cr. Hrs.

Continued treatment implementation with groups and individuals; focus on compensatory strategies, low tech and high tech adaptive technology, and case coordination. Five lecture, six lab, and seven practicum hours per week.

Prerequisite(s): OTA 231

233 Clinical Issues I 1 Cr. Hr.

Facilitation of problem solving during affiliation experiences including feedback on documentation, professional and ethical issues. Taken conjointly with OTA 220 Clinical Affiliation I in classroom and a distance learning format. One lecture hour per week.

Prerequisite(s): OTA 232

234 Clinical Issues II 1 Cr. Hr.

Facilitation of continued professional development while completing OTA 221 Clinical Affiliation II. Issues related to the transition from student to professional including development of resume and interview skills, identification of career goals and prospective employers, responsibilities to state and national professional organizations.

Prerequisite(s): OTA 233

251 Lab for OTA 231

Laboratory must be taken with OTA 231.

252 Lab for OTA 232

Laboratory must be taken with OTA 232.

261 Clinical for OTA 231

Clinical must be taken with OTA 231.

262 Clinical for OTA 232

Clinical must be taken with OTA 232 and OTA 252.

Prerequisite(s): OTA 231

297 Special Topics in Occupational Therapy Assisting R 1 - 4 Cr. Hrs.

Variable course content according to community and program needs for continuing education and state of the art techniques. Areas of special interest which would not fit or be appropriate for the regular OTA curriculum would also be presented.

Paralegal (PAR)**105 Paralegal Principles 4 Cr. Hrs.**

Legal system and the function of the paralegal within that system. The role of case law, statutes, administrative regulations, the constitution, and court rules within that system and analysis of various judicial opinions.

Prerequisite(s): Concurrent registration with PAR 106. Student must be accepted into the Paralegal program. and grade of "C" or better required to pass.

106 Paralegal Principles: Technology 2 Cr. Hrs.

Introduction to the technology used by paralegals in law firm environments. Includes software programs for file management, timekeeping and legal research on the Internet. Students will also learn to use of various types of office equipment.

Prerequisite(s): Concurrent registration with PAR 105. Student must be accepted into the Paralegal program. and grade of "C" or better required to pass.

111 Legal Research & Writing 4 Cr. Hrs.

An introduction to major Ohio legal publications and techniques of legal research and writing. Students will complete problems assigned in legal research and a memorandum of law.

Prerequisite(s): PAR 105 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

112 Legal Research & Writing II 4 Cr. Hrs.

Builds on and develops skills learned in Legal Research and Writing I. Use of federal and national regional legal materials. Students will prepare a memorandum of law and actual brief.

Prerequisite(s): LAP 111 or PAR 111 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

113 Legal Research & Writing III 3 Cr. Hrs.

Analysis and computer-assisted research of federal and state statutory and case law with emphasis on use of LEXIS system; preparation of memoranda of law.

Prerequisite(s): LAP 112 or PAR 112 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

115 Contract Law & the Uniform Commercial Code 3 Cr. Hrs.

Principles of contract law and Uniform Commercial Code (U.C.C.) emphasizing sales, secured transactions and consumer law; problems in contract agreements and accompanying documents.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

121 Litigation I 3 Cr. Hrs.

The basics of jurisdiction of state and federal courts, tort law and the rules of evidence. Emphasis is on the Rules of Civil Procedure.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

122 Litigation II 3 Cr. Hrs.

Procedural matters involved in civil litigation and an overview of the attorney's function in the trial process. Skills relative to interviewing, document preparation and organization of materials for civil trial are emphasized.

Prerequisite(s): LAP 121 or PAR 121 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

131 Real Estate Transactions I 3 Cr. Hrs.

The law of real property and common types of real estate transactions and conveyances, such as deeds, real estate sales contracts, and leases and an overview of the system of recording. Problems in instrument drafting.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

132 Real Estate Transactions II 3 Cr. Hrs.

Emphasis on commercial transactions and financing instruments. The student acquires skills dealing with forms required by lending institutions and government agencies.

Prerequisite(s): LAP 131 or PAR 131 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

201 Business Organization I 3 Cr. Hrs.

Corporation problems involving foreign corporations, mergers, consolidations and dissolutions, shareholder agreements and employment contracts.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

202 Business Organization II 3 Cr. Hrs.

Corporation problems involving foreign corporations, mergers, consolidations and dissolutions, shareholder agreements, and employment contracts.

Prerequisite(s): LAP 201 or PAR 201 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

205 Criminal Law & Procedure 3 Cr. Hrs.

The Ohio Criminal Code and the Criminal Procedure Laws. Pleadings of criminal trials.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

211 Probate Law I 3 Cr. Hrs.

A survey of probate law including summary administrations of estates, full estate administration, adoption, guardianship, name change, minor settlement, wrongful death, and testamentary trusts.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

212 Probate Law II 3 Cr. Hrs.

The law of wills and estates, and estate administration including Ohio tax returns and fiduciary accounting.

Prerequisite(s): LAP 211 or PAR 211 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

213 Estate Taxes 3 Cr. Hrs.

Tax law affecting the decedent's estate with emphasis on final personal income tax, Ohio and federal estate tax and the estate's income tax including preparation of tax returns and schedules.

Prerequisite(s): LAP 211 or PAR 211 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

215 Family Law 3 Cr. Hrs.

Divorce and dissolution and all matters relating to the ending of a marriage. Preparation of pleadings, forms, and court decrees. Ethical concerns in a family practice.

Prerequisite(s): LAP 121 or PAR 121 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

220 Legal Ethics 3 Cr. Hrs.

Ethical issues facing paralegals in various size law firms are assessed including the unauthorized practice of law, confidentiality, and conflicts of interest. Ethical issues related to time keeping, client's files, record maintenance, organizational skills and software are emphasized.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

235 Bankruptcy Law 3 Cr. Hrs.

Federal bankruptcy statutes. Procedures required to file bankruptcy and skills necessary to gather information are stressed.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

240 Social Security Law 1.5 Cr. Hrs.

Introduction to Social Security Law concepts and practices.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

241 Workers' Compensation Law**1.5 Cr. Hrs.**

Introduction to concepts and practices of Ohio Workers' Compensation Law and the Industrial Commission.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

242 Intellectual Property 1.5 Cr. Hrs.

Overview of legal concepts of patents, trademarks and copyrights. Forms and procedures required to legally acquire ownership of intellectual property.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

243 Legal Interviewing Skills 1.5 Cr. Hrs.

The role of a legal assistant in client and witnesses interviews, including interpersonal skills and ethical concerns.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

244 Ohio Protection Orders 1.5 Cr. Hrs.

Basic understanding of domestic violence dynamics, plus a working knowledge of Ohio Civil Protection Order (CPO) law and procedures. Includes working knowledge of the forms and orders required to put a CPO into effect and enforce it. Also includes societal barriers and justice system barriers that impede safety and justice for victims of domestic violence and their children.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

245 Administrative Law 1.5 Cr. Hrs.

Introduction to Federal and Ohio Administrative Law and Agencies.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

246 Juvenile Law 1.5 Cr. Hrs.

Juvenile delinquency, parentage, child custody and child support and all matters relating to juveniles in the justice system.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

247 Legal Technology Resources**1.5 Cr. Hrs.**

Use of software in a legal environment, including spreadsheets, databases, data backup media, group calendaring, and research on the Internet.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and BIS 160 or equivalent and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

248 Employment Discrimination**1.5 Cr. Hrs.**

An introduction to employee rights in the work place, including civil rights, Title VII, age discrimination and sexual harassment.

Prerequisite(s): PAR 105 and PAR 106 or LAP 105

249 Litigation Presentations 1.5 Cr. Hrs.

Presentation development using scanner technology, digital and paper photographs, and paper and electronic documents for use in litigation scenarios using rules of evidence.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and restricted to majors and additional Prerequisite(s): BIS 160 and PAR 121

250 Appellate Procedures 1.5 Cr. Hrs.

The process of initiating criminal and civil appeals. Requirements for ordering transcripts and organizing appellate briefs.

Prerequisite(s): PAR 121 and restricted to majors

251 Attorney Client Privilege/Work Product 1.5 Cr. Hrs.

Attorney-client privilege and non-discoverable work product.

Prerequisite(s): PAR 121 and restricted to majors

291 Paralegal Internship I 2 Cr. Hrs.

Application of skills learned in the classroom to a law related work experience. Interviewing techniques; development of a resume; preparation of a report and log of the work experience. Eight (8) practicum hours per week. (Eighty hours per quarter)

Prerequisite(s): LAP 112 or PAR 112 and LAP 220 or PAR 220 and LAP 121 or PAR 121 and permission and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

292 Paralegal Internship II 2 Cr. Hrs.

Application of skills learned in the classroom to a law related work experience; students prepare a portfolio displaying evidence of skills learned. Eight (8) practicum hours per week. (Eighty hours per quarter)

Prerequisite(s): LAP 291 or PAR 291 and permission and grade of "C" or better required to pass. Student must be accepted into the Paralegal program.

297 Special Topics in Paralegal**R 0.5 - 6 Cr. Hrs.**

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

Prerequisite(s): LAP 105 or PAR 105 and PAR 106 and grade of "C" or better required to pass. Student must be accepted into the Paralegal program and permission of department chairperson.

Physical Education (PED)

101 Beginning Swimming R 1 Cr. Hr.

Elementary knowledge of swimming techniques and overcoming the fear of water. Instruction in basic swimming strokes including front crawl plus elementary diving and water safety skills. Two lab hours per week.

102 Intermediate Swimming R 1 Cr. Hr.

Increases skill in basic swimming strokes, such as the breaststroke, side stroke, backstroke, front and back crawl plus diving and water safety skills. Two lab hours per week.

Prerequisite(s): PED 101 or equivalent skill

105 Physical Fitness R 1 Cr. Hr.

Provides exercise suited to individual needs and body types. Selected strength, endurance and flexibility activities. Increases understanding and appreciation of the values of physical activity and weight control. Two lab hours per week.

106 Weight Training R 1 Cr. Hr.

Develops muscle tone and muscle endurance through lifting (isotonic) exercises and includes philosophy, theory and programs designed for individual needs. Two lab hours per week.

107 Flexibility Fitness R 1 Cr. Hr.

A comprehensive flexibility program involving static and ballistic stretching exercises to improve the overall physical fitness level of the participant. Two lab hours per week.

117 Badminton R 1 Cr. Hr.

Beginning skills, rules and regulations and strategy for both singles and doubles play. Skill development relates to the basic forehand and backhand swing plus the serve, clear and smash shots. Two lab hours per week.

119 Golf R 1 Cr. Hr.

Beginning skills, rules and regulations, equipment and supplies, safety factors plus courtesies. Includes basic swing along with chipping and putting. Two lab hours per week.

125 Bowling R 1 Cr. Hr.

Beginning skills, rules and regulations, and courtesies. Emphasis on the basic approach, delivery, follow through, plus scoring. Two lab hours per week.

126 Volleyball R 1 Cr. Hr.

Develops basic skills including the various serves, spikes, sets, team strategy, rules and regulations, and skill techniques. Two lab hours per week.

127 Basketball R 1 Cr. Hr.

Develops fundamental skills and techniques of basketball such as shooting, passing, dribbling and team strategy, including terminology, rules and basic drills. Two lab hours per week.

131 Beginning Tennis R 1 Cr. Hr.

Basic techniques and fundamental skills of tennis such as basic strokes (forehand, backhand, and serve), playing strategy, terminology, scoring, and rules. Two lab hours per week.

132 Intermediate Tennis R 1 Cr. Hr.

Intermediate skill techniques plus playing strategy for both singles and doubles related to shot selection and placement. Two lab hours per week.

Prerequisite(s): PED 131 or equivalent skill

133 Advanced Tennis R 1 Cr. Hr.

Develops advanced skill techniques related to actual game strategy and the psychological aspect of the competition. Two lab hours per week.

Prerequisite(s): PED 132 or equivalent skill

134 Snow Ski Conditioning R 1 Cr. Hr.

A general conditioning and/or fitness class designed for skiers that develops cardiovascular endurance, muscle strength, and flexibility. Two lab hours per week.

136 Beginning Yoga R 1 Cr. Hr.

Introduction and practical application of basic yoga methods including a historical and philosophical review. Two lab hours per week.

137 Intermediate Yoga R 1 Cr. Hr.

Intermediate skills regarding positions and methods of yoga. Two lab hours per week.

Prerequisite(s): PED 136 or equivalent skill

142 Beginning Pilates R 1 Cr. Hr.

Pilates strengthens muscles, improves posture and balance, provides flexibility, and focuses on training the mind and body to work together toward the goal of overall health/fitness. Two lab hours per week.

143 Intermediate Pilates R 1 Cr. Hr.

This course is designed to introduce the student to the intermediate mat Pilates' method of body conditioning. This higher level of Pilates will help enhance posture and balance, provide better flexibility, and train the mind and body to work together toward the goal of overall health and fitness. Two lab hours per week.

Prerequisite(s): PED 142

144 Advanced Jogging/Fitness R 2 Cr. Hrs.

Knowledge and procedure(s) for obtaining advanced jogging/fitness. Detailed, individually formulated running and exercise program. One lecture, two lab hours per week.

Prerequisite(s): PED 105 or permission of instructor

148 Beginning Social Dance R 1 Cr. Hr.

Basic skills of social dancing including ballroom dances, such as the foxtrot, waltz, swing, cha-cha and rumba, along with additional musical knowledge. Two lab hours per week.

149 Intermediate Social Dance R 1 Cr. Hr.

Improves knowledge and skill related to the popular ballroom dance steps, developing grace and self-confidence. Two lab hours per week.

Prerequisite(s): PED 148 or equivalent skill

151 Beginning Square Dance R 1 Cr. Hr.

Develops basic skills of square dancing while responding to a caller's voice. Fifty basic movements are taught. Two lab hours per week.

152 Intermediate Square Dance R 1 Cr. Hr.

Develops seventy-five basic skills associated with modern square dance. Two lab hours per week.

Prerequisite(s): PED 151 or equivalent skill

153 Water Aerobics R 1 Cr. Hr.

A fitness concept comprised of a series of exercises performed in the water with music. Swimming ability is not required. Two lab hours per week.

154 Aerobic Conditioning R 1 Cr. Hr.

A program of fitness composed of exercise routines performed with music. Aerobics increases cardiovascular endurance, flexibility, and strength through selected movements. Two lab hours per week.

161 Beginning Racquetball R 1 Cr. Hr.

A basic understanding of the rules and regulations, equipment and supplies, safety factors, fundamental skill techniques and strategy. Emphasis on positioning, stance, grip, basic strokes, and serving. Two lab hours per week.

162 Intermediate Racquetball R 1 Cr. Hr.

Intermediate skills and techniques. Emphasis on shot selection, placement, strategy and overall consistency. Two lab hours per week.

Prerequisite(s): Successful completion of PED 161, instructor's approval or a "C" rating based on league competition.

163 Advanced Racquetball R 1 Cr. Hr.

Advanced skills and techniques. Emphasis on shot selection, placement, strategy and the psychological aspect of the game. Two lab hours per week.

Prerequisite(s): Successful completion of PED 162, instructor's approval or a "B" rating based on league competition.

164 Cardio Sculpt R 1 Cr. Hr.

Introduction to four different approaches to strength training by using a choreographed, group training program. These approaches employ a progressive, goal-based routine that incorporates modern lifting techniques to optimize results. Two lab hours per week.

165 Country Western Dance R 1 Cr. Hr.

Fundamental skills and techniques required for the style and fluidity of movement related to Country Western dancing. Basic movement patterns of steps, turns, and breaks at the beginning level. Two lab hours per week.

166 Fitness Walking R 1 Cr. Hr.

Techniques of power walking, physiological involvement, proper stretching exercises, diet and nutrition and mobile meditation related to cardiovascular improvement. Two lab hours per week.

167 Lifetime Fitness R 1 Cr. Hr.

To provide students the opportunity to experience a variety of lifetime physical activities/ exercises that will maintain or improve their quality of life. Two lab hours per week.

168 Advanced Weight Training R 2 Cr. Hrs.

Advanced weight training methods in resistive weight training, including body building, power lifting, and lifting related to specific goals; individually suited. One lecture, two lab hours per week.

Prerequisite(s): PED 106 or permission of instructor

170 Tai Chi R 1 Cr. Hr.

The ancient art of Tai Chi Chuan was developed out of the Taoist traditions in China. The Taoists were interested in the rhythms of nature. Since people are a part of nature, they devised movements and breathing techniques that would bring people into harmony with their environment. Tai Chi can be done for health, meditation or martial arts, but today it is mostly practiced for its health benefits, which are well documented by various scientific studies. Two lab hours per week.

171 Beginning Self Defense R 1 Cr. Hr.

Development of fundamental skills and techniques associated with the martial arts of Karate, Judo and Aikido. Two lab hours per week.

172 Intermediate Self Defense R 1 Cr. Hr.

Development of the intermediate skills and techniques associated with the martial arts. Two lab hours per week.

Prerequisite(s): Successful completion of PED 171, instructor's approval, or a green belt from another organization.

174 Practical Aspects of Self Defense for Women R 1 Cr. Hr.

A personal self-defense class involving a basic collection of knowledge and skill related to prevention, non-physical responses, and physical responses. Current research and analysis of the dynamics of sexual assault. Two lab hours per week.

176 Core Conditioning R 1 Cr. Hr.

Core conditioning strengthens and stabilizes the deepest of the trunk muscles, improves posture and increases flexibility and balance by maintaining mobility and stability. Two lab hours per week.

192 Group Indoor Cycling R 1 Cr. Hr.

Introduction to group indoor cycling. Understanding of the contributions of cycling to cardiorespiratory endurance, muscular endurance, and additional components of physical fitness. A variety of training techniques enable students to design individualized programs to help them improve their level of fitness and health. Two lab hours per week.

193 Physical Fitness Evaluation R 3 Cr. Hrs.

To provide students the opportunity to experience and understand the process of evaluating basic physical fitness levels in cardio-respiratory endurance, flexibility, strength and body composition on an individual basis in order to enhance selection of physical activities. This will enable the students to determine the desirable level of physical fitness to best meet the personal needs/requirements of the client.

Prerequisite(s): Suggested BIO 107

199 Computer Applications in Physical Education 2 Cr. Hrs.

Provides student with fundamental knowledge of computer functions, terminology and programming; includes computer application in physical education and athletics.

200 First Aid & Safety 2 Cr. Hrs.

Prevention and care of injuries occurring from accidents in the home, school and community. Successful completion of the class will result in the student obtaining Red Cross certification in community first aid and CPR.

203 Advanced Swimming R 1 Cr. Hr.

Advanced skill development in the basic swimming strokes; breast, side, back, front, and back crawl. Additional work will be done in underwater areas, diving and survival skills. Two lab hours per week.

Prerequisite(s): PED 102 or equivalent skill

204 Advanced Aerobic Conditioning R 2 Cr. Hrs.

A fitness concept made up of exercise routines done with music; increases endurance, flexibility, and strength beyond beginning level. One lecture, two lab hours per week.

Prerequisite(s): PED 154 or permission of instructor

206 Water Safety Instruction R 3 Cr. Hrs.

Content and teaching methods necessary to instruct all levels of the American Red Cross swimming program. One and one half lecture, three lab hours per week.

208 Cardiopulmonary Resuscitation R 1 Cr. Hr.

Basic life support for cardiac arrest, artificial respiration and artificial circulation. Red Cross CPR certification upon successful completion of the course.

209 Beginning Scuba Diving R 2 Cr. Hrs.

Nationally certified PADI open water scuba course. Diving physics and physiology, safe use of diving equipment, communications, safety rules and problem management, general diving skills required for certification. Open-water certification available at additional cost. One lecture, two lab hours per week.

210 Intermediate Bowling R 1 Cr. Hr.

Fundamentals of bowling are reviewed with emphasis on teaching intermediate techniques in the following areas: approach, delivery, pin-aim or spot-aim method and spare making. Two lab hours per week.

Prerequisite(s): PED 125 or equivalent skill

211 Intermediate Volleyball R 1 Cr. Hr.

Basic skills of volleyball are reviewed and practiced with emphasis on intermediate techniques. Drills, practice procedures, and team strategy are discussed. Two lab hours per week.

Prerequisite(s): PED 126 or equivalent skill

212 Advanced Volleyball R 1 Cr. Hr.

Intermediate skills will be reviewed and practiced with emphasis on body mechanics. The development of advanced offensive and defensive team strategy necessary for competitive play will be stressed. Two lab hours per week.

Prerequisite(s): PED 211 or equivalent skill

215 Basketball Officiating 2 Cr. Hrs.

Basketball officiating includes basic knowledge about rules, regulations and officiating techniques. Materials will be supplied by O.H.S.A.A. and students passing the final exam will be certified to officiate in Ohio.

216 Football Officiating 2 Cr. Hrs.

Basic information about rules, regulations and officiating techniques. Materials will be supplied by O.H.S.A.A. Students passing the final exam will be certified to officiate in Ohio.

217 Baseball Officiating 2 Cr. Hrs.

Basic information about rules, regulations and umpiring techniques in baseball. Materials supplied by O.H.S.A.A. Students passing the final exam will be certified to officiate in Ohio.

219 Standard First Aid & Cardiopulmonary Resuscitation
3 Cr. Hrs.

Basic principles related to personal safety, accident prevention, treatment and cardiopulmonary resuscitation. National Red Cross Certification will be issued upon successful completion of the class.

224 Intermediate Golf R 1 Cr. Hr.
Basic fundamentals are reviewed with emphasis on intermediate skills. Grip, stance, swing, chipping and putting are reviewed and shot selection and strategy are emphasized. Two lab hours per week.

Prerequisite(s): PED 119 or equivalent skill

229 Advanced Open Water Scuba Diving R 2 Cr. Hrs.

Recommended for diving enthusiasts who want to further their diving skills with various challenging and interesting open water dives. One lecture, two lab hours per week.

Prerequisite(s): PED 209 or approval of department

231 Rescue Diving R 2 Cr. Hrs.

Prepares the student to better manage realistic rescue situations in addition to developing an increased awareness of dive safety and the anticipation and prevention of potential diving problems. One lecture, two lab hours per week.

Prerequisite(s): PED 229 or approval of department

232 Lifeguard Training 3 Cr. Hrs.

Expansion of training in the knowledge and skills required as a lifeguard in all areas of activity around an aquatics facility. Successful completion results in Red Cross certification. One and one-half hour lecture, three hours lab per week.

Prerequisite(s): PED 102 or equivalent skill

234 Concepts of Total Fitness
R 3 Cr. Hrs.

An orientation to total fitness with an emphasis on evaluation and maintenance. A lifetime concept of fitness is presented that will help students understand and develop a positive healthy lifestyle.

235 Introduction to Physical Education
3 Cr. Hrs.

The profession of physical education, its history, basic principles, relation to growth and mental health. Professional opportunities in health, physical education, and recreation.

236 Personal & Community Health
3 Cr. Hrs.

Enables the student to build a philosophy of health. Basic health principles and theories are applied to both personal and community health problems on a local and national level.

237 Organization & Administration of Recreation, Fitness & Sports Programming
3 Cr. Hrs.

This course provides the concepts and applications of effective programming and administration of sport, fitness and recreation programs. Students will be able to identify best practices applicable to various settings and groups.

Prerequisite(s): DEV 065 and DEV 110

238 Physical Education for the Elementary School 3 Cr. Hrs.

Designed to acquaint students with a variety of teaching techniques; to review current programs and practices in elementary physical education and to plan physical education classes for elementary students.

239 Athletic Injuries 3 Cr. Hrs.

Application of principles involved in prevention, care and treatment of athletic injuries.

245 Coaching Baseball 2 Cr. Hrs.

Theory, skills, strategies and methods of coaching baseball.

246 Coaching Basketball 2 Cr. Hrs.

Theory, skills, strategies and methods of coaching basketball.

247 Coaching Football 2 Cr. Hrs.

Coaching philosophy, skill development, drills, strategies, organizational format, scheduling, budget, scouting, plus other related information.

248 Coaching Soccer 2 Cr. Hrs.

Coaching philosophy, skill development, drills, strategies, organizational format, scheduling, budget, scouting, plus other related information.

249 Principles of Coaching & Leadership 3 Cr. Hrs.

Foundational knowledge essential for successful coaching of any sport, including development of personal coaching philosophy. Addresses three levels of coaching: youth, collegiate and professional.

Prerequisite(s): DEV 064 and DEV 075 and DEV 084

250 Introduction to Exercise Science
R 3 Cr. Hrs.

This course provides students an opportunity to define professional goals and assess personal strengths and weaknesses in light of competencies essential for an exercise science career.

251 Principles & Methods of Training I
3 Cr. Hrs.

An exploration of physiology related to the utilization of the components of physical fitness needed to individualize an exercise prescription. Includes the opportunity to design an exercise prescription.

Prerequisite(s): PED 193 and DEV 085, DEV 064 and DEV 075

252 Principles & Methods of Training II
3 Cr. Hrs.

Integration of risk stratification, fitness assessment, exercise testing, interpretation, consultation, and exercise prescription skills. Application of knowledge and skills to various populations and disease states through case studies and simulations.

Prerequisite(s): PED 251

253 Advanced Water Aerobics
R 2 Cr. Hrs.

An advanced fitness concept comprised of a series of exercises performed in the water with music. One lecture, two lab hours per week.

Prerequisite(s): PED 153 or permission of instructor

260 Introduction to Sport Management
3 Cr. Hrs.

Exploration of the growing professional opportunities within the sport management industry while surveying the sociological, historical, psychological, and philosophical foundations of sport. Application of management and organization concepts to sport enterprises.

Prerequisite(s): DEV 064 and DEV 075 and DEV 085

261 Athletic Facility Planning & Management 3 Cr. Hrs.

Sport facility management and the role of the facility manager, including application skills to a variety of types of facilities.

Prerequisite(s): DEV 085 and DEV 064 and DEV 075

263 History of Sport & Physical Education 3 Cr. Hrs.

Analysis of the history of American sport from the Colonial era to the present with study of the relationship between sport and major social issues such as race, gender, ethnicity, and class.

Prerequisite(s): DEV 064 and DEV 075 and DEV 084

268 Motor Development 3 Cr. Hrs.

Development of movement abilities as a continuous process of change in functional capacity with emphasis on how motor development relates to age and how change occurs sequentially. Also includes developmental change in movement behavior, factors underlying developmental changes, the process of change, and the movement outcome.

Prerequisite(s): DEV 064 and DEV 075 and DEV 084

269 Motor Learning & Performance
3 Cr. Hrs.

Exploration of the relationship between motor learning and motor performance, including the physical and psychological principles that influence both. Examination of the elements that facilitate or prohibit the control, achievement, and retention of motor skills.

Prerequisite(s): PED 268

270 Physical Education Internship**R 1 - 12 Cr. Hrs.**

Provides the student with a basic understanding of what it means to be a physical educator. The student will serve as a teaching assistant in several activity classes, work with the athletic or intramural programs in some capacity and visit an off-campus physical education class.

271 Certification Exam Preparatory Course**3 Cr. Hrs.**

Theoretical knowledge and practical skills in preparation for a national certification exam aligned with guidelines and standards of the fitness industry.

272 Methods of Teaching Strength Training**2 Cr. Hrs.**

Introduction to methods of teaching strength training which includes the use of free weights, machines and additional equipment used in the field. Emphasizes a variety of training techniques used to design individualized programs for different populations. Also includes the basic principles of kinesiology and physiology.
Prerequisite(s): PED 106

273 Methods of Teaching Group Fitness**2 Cr. Hrs.**

Knowledge and experience for teaching and evaluating a variety of group exercise classes. Includes a variety of group exercise forms, including step aerobics, water aerobics, yoga, pilates, cycling, kickboxing and strength training.
Prerequisite(s): PED 154

297 Special Topics in Physical Education**R 1 - 3 Cr. Hrs.**

Opportunity for students to receive credit for both non-traditional and traditional courses, workshops or special interest topics in the discipline of physical education.
Prerequisite(s): Will vary according to topic area.

Philosophy (PHI)**204 Great Books: Philosophy****4 Cr. Hrs.**

Introduction to selected great books in the history of Western philosophy. Three eras will be introduced (ancient/medieval, modern, and contemporary) and studied within their respective historical contexts and as an exercise in critical thinking.

205 Introduction to Philosophy**4 Cr. Hrs.**

Basic nature of philosophy, its relationship to physical and social sciences and theology and its value to the individual.

206 Personal Ethics**4 Cr. Hrs.**

Historical inquiry into the major concepts and attitudes of moral and ethical theory in Western society, emphasizing the role of human responsibility and the conditions for making ethical judgments.

207 Logic**4 Cr. Hrs.**

Principle elements in deductive and inductive logic. Analysis of three acts of the intellect and the laws of reasoning. Application of principles to specific cases.

209 Business Ethics**3 Cr. Hrs.**

Evaluates the moral values, standards and practices of contemporary business through case studies.

297 Special Topics in Philosophy**R 1 - 6 Cr. Hrs.**

Provides opportunities to receive credit for non-traditional courses (TV and newspaper) as well as special interest topics in philosophy.

Physics (PHY)**100 Introduction to Physics****4 Cr. Hrs.**

A survey of motion, forces, energy, heat, gas laws, kinetic theory, electricity and magnetism. Three lecture, three lab hours per week.

*Prerequisite(s): DEV 108 or MAT 106***104 Sound, Light & Modern Physics****4 Cr. Hrs.**

Survey of sound, music, light, color, atomic, and nuclear physics and relativity for non-science majors. Three lecture, three lab hours per week.

*Prerequisite(s): PHY 100***106 Physics for Radiologic Technology****5 Cr. Hrs.**

Concepts of electrical energy, electromagnetic energy, production of x-radiation, interaction with matter, and the x-ray tube, circuitry and special equipment. Four lecture, two lab hours per week.

*Prerequisite(s): Admission to RAT program***107 Lab for PHY 106***Laboratory must be taken with PHY 106.***110 Lab for PHY 100***Laboratory must be taken with PHY 100.***119 Lab for PHY 104***Laboratory must be taken with PHY 104.***131 Technical Physics I****4 Cr. Hrs.**

Non-calculus mechanics including kinematics, dynamics, statics, work, energy, power, complex motions and fluids. Three lecture, three lab hours per week.

*Prerequisite(s): MAT 132 or equivalent***132 Technical Physics II****4 Cr. Hrs.**

Non-calculus properties of matter, heat, thermodynamics, waves, sound and light. Three lecture, three lab hours per week.

*Prerequisite(s): PHY 131***133 Technical Physics III****4 Cr. Hrs.**

A non-calculus course in electricity including electrostatics, electric fields, D.C. electric circuits, capacitance, magnetism, electromagnetic induction, and alternating current. Three lecture, three lab hours per week.

*Prerequisite(s): PHY 131***141 College Physics I****4 Cr. Hrs.**

Algebra based university parallel sequence in mechanics including vectors, statics, kinematics, dynamics, work and energy, momentum, and rotational motion. Three lecture, three lab hours per week.

*Prerequisite(s): MAT 116 or equivalent***142 College Physics II****4 Cr. Hrs.**

Algebra-based university parallel sequence in properties of matter, hydrostatics and fluid dynamics, heat and thermodynamics, periodic motion, waves, and sound. Three lecture, three lab hours per week.

*Prerequisite(s): PHY 141***143 College Physics III****4 Cr. Hrs.**

Algebra based university parallel course in electrostatics, D.C. and A.C. circuits, electromagnetism, and optics. Three lecture, three lab hours per week.

*Prerequisite(s): PHY 141***201 General Physics I****6 Cr. Hrs.**

Fundamentals of mechanics including kinematics, dynamics, work and energy, momentum using calculus as appropriate. Five lecture, three lab (PHY 207) hours per week. Note: Co-requisite MAT 201.

*Co-requisite(s): MAT 201***202 General Physics II****6 Cr. Hrs.**

Oscillations, gravity, fluids, waves, sound, thermodynamics and kinetic theory, using calculus as appropriate. Five lecture, three lab (PHY 208) per week. Note: Co-requisite MAT 202.

*Prerequisite(s): PHY 201.**Co-requisite: MAT 202***203 General Physics III****6 Cr. Hrs.**

Electrostatics, D.C. conduction and circuits, magnetism, electromagnetic induction, quantum mechanics and special relativity. Calculus used extensively. Five lecture, three lab (PHY 209) hours per week. Note: Co-requisite MAT 203.

*Prerequisite(s): PHY 202.**Co-requisite: MAT 203***207 Lab for PHY 201***Laboratory must be taken with PHY 201.***208 Lab for PHY 202***Laboratory must be taken with PHY 202.***209 Lab for PHY 203***Laboratory must be taken with PHY 203.***220 Introduction to Computational Physics****3 Cr. Hrs.**

Provides students with an introduction to the modeling and simulation of physical systems using MATLAB. Topics include the MATLAB desktop, array manipulations, relational and logic operations, control flow, creating M-files, low-level I/O, graphics, and symbolic manipulations. Two lecture, two lab hours per week.

Prerequisite(s): PHY 201 and MAT 201 or equivalent

245 Concepts in Physics 5 Cr. Hrs.

Basic concepts and applications of physics including motion, forces, electricity, magnetism and optics, emphasizing scientific inquiry and process skills integrated with mathematics. Elementary education majors only. Four lecture, three lab hours per week.

Prerequisite(s): ENG 112 and ASE 145 and MAT 142 and MAT 110

246 Concepts & Applications in Physics 5 Cr. Hrs.

Concepts and applications in physics with emphasis on scientific inquiry and process skills. Topics include motion, force and dynamics, work and energy. Middle childhood education majors only. Four lecture, three lab hours per week.

Prerequisite(s): ASE 145 and MAT 142 or MAT 110 and ENG 112

270 Physics Internship R 2 - 12 Cr. Hrs.

Designed to support a variety of experiential learning needs. Adult learners with extensive learning from prior experience may receive acknowledgment of that learning with internship credit upon submission of a portfolio to an evaluation committee. Younger students with limited experience will participate in selected non-classroom experiences with relationship to their educational needs. Students already working full or part time may apply to use that experience in fulfillment of the internship requirement. For the latter two types of students, learning outcomes are established and related reports and/or projects are submitted each quarter.

295 Independent Study in Physics R 1 - 3 Cr. Hrs.

Investigates areas of special interest under the direction of physics faculty. Course may be repeated once (PHY 296) but not to exceed six credit hours. Open to second year students with 3.0 GPA in physics and mathematics.

Prerequisite(s): Permission of instructor

297 Special Topics in Physics R 1 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (TV and newspaper) as well as special interest topics in physics. Objectives will vary with the particular content area.

Plastics Technology (PLA)**106 Introduction to Plastics Technology 4 Cr. Hrs.**

Introduction to the plastics industry. Plastics terminology, materials and product development including an overview of basic processing methods with an emphasis on safe operating procedures. Two lecture, three lab hours per week.

150 Plastics Processing Equipment Fundamentals 4 Cr. Hrs.

Applied study of equipment operating principles, including applied hydraulics, pneumatics and basic electrical theory as related to plastic processing machinery. Equipment suppliers, basic troubleshooting and safety procedures are also reviewed. Three lecture, two lab hours per week.

Prerequisite(s): PLA 106 or permission of instructor

208 Plastics Materials Processing I 4 Cr. Hrs.

An overview of different plastic materials and the application of various processing methods such as compression, extrusion, injection, thermoforming, molding and fabrication to produce products. Three lecture, two lab hours per week.

Prerequisite(s): PLA 150 or permission of instructor

210 Plastics Materials Testing 4 Cr. Hrs.

Plastics industry material resource information in the application of testing methods and procedures to determine pertinent product properties from raw stock through compounded material to final finished product. Three lecture, two lab hours per week.

Prerequisite(s): PLA 208 or permission of instructor

220 Extrusion (Process II) 4 Cr. Hrs.

Detailed examination of the extrusion and blow molding machines and processes through a combination of lecture and laboratory sessions emphasizing processing fundamentals. Experience with the basics of extruder operation and process troubleshooting techniques in preparation for extrusion certification. Three lecture, two lab hours per week.

Prerequisite(s): PLA 208 or permission of instructor

225 Injection Molding (Process II) 4 Cr. Hrs.

Detailed examination of the injection molding machine and process through a combination of lecture and laboratory sessions emphasizing processing fundamentals. Experience with injection molding machine operation and process troubleshooting techniques in preparation for molder certification. Three lecture, two lab hours per week.

Prerequisite(s): PLA 208 or permission of instructor

Political Science (PLS)**101 American Federal Government I 3 Cr. Hrs.**

American political system at the national level, process of government, democratic theory and development of the Constitution, citizen participation through voting, interest groups and political parties.

102 American Federal Government II 3 Cr. Hrs.

American political system at the national level, structure and functions of legislative, executive and judicial branches. Issues of civil liberties and equal rights.

103 State Government 3 Cr. Hrs.

Organization and operation of state governments, evolution of constitutions, elections, political parties, the three branches of government, and finances and taxation.

104 Urban Government 3 Cr. Hrs.

Organization, powers, functions, and problems of cities and metropolitan areas (particularly in Ohio), modern trends in budgeting and finance.

200 Political Life, Systems & Issues 4 Cr. Hrs.

Basic political and government concepts and systems, including ideologies and political systems; current political issues in Asia, Africa, Europe, Latin America, along with United States interests and policy options.

201 International Relations 3 Cr. Hrs.

Principles and techniques of international politics emphasizing different world perspectives.

205 Model United Nations/ International Issues 1 - 3 Cr. Hrs.

History and structure of the United Nations with an in-depth look at selected current world issues; participation in model U.N. simulations, and opportunity to attend Dayton Model United Nations Conference.

270 Political Science Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

297 Special Topics in Political Science R 1 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses (TV and newspaper) as well as special interest topics in Political Science.

Psychology (PSY)

105 Survey of Psychology 3 Cr. Hrs.

A survey of topics in the field of psychology, appropriate for some technical programs. This course is NOT accepted as the general Psychology requirement for Sinclair and university parallel programs. PSY 119 and PSY 121/122 cover the same material in more depth and are transferable.

117 Psychology of Deafness 3 Cr. Hrs.

Primary psychological issues in the development and functioning of hearing impaired persons; resources for promoting psychological growth of hearing impaired persons. Topics included: intellectual functioning, personality issues, personal/social adjustment issues, family dynamics.

119 General Psychology 5 Cr. Hrs.

Accelerated university parallel course covering the same content as PSY 121 and 122, including: history, research, physiology, sensation and perception, learning, memory, consciousness, personality, development, gender, social, cognition, motivation, emotion, stress, disorders and therapies. Students should have reading and comprehension skills commensurate with the accelerated pace required for combining two courses in one quarter.

Prerequisite(s): DEV 065

120 Psychology Applications 1 Cr. Hrs.

This recommended companion course to PSY 119 provides practical applications of theories, methods and research in psychology. Individual and group activities emphasize learning through experience. Topics include psychology's history and research, the physiology of behavior, sensation and perception, states of consciousness, learning, memory, personality theory, lifespan development, gender, social psychology, cognition, motivation, emotion, stress, psychological disorders and therapies.

Prerequisite(s): DEV 065

121 General Psychology I 3 Cr. Hrs.

First of a two-course sequence covering: history of psychology, research methods, physiology of behavior, sensation and perception, learning, memory, states of consciousness, and personality theories. Many Sinclair Community College and university parallel programs will not accept PSY 121 without subsequent completion of PSY 122.

Prerequisite(s): DEV 065

122 General Psychology II 3 Cr. Hrs.

Second of a two-course sequence (with PSY 121) covering developmental psychology, psychology of gender, social psychology, cognition, motivation, emotion, stress, psychological disorders and therapeutic approaches.

Prerequisite(s): PSY 121

123 Honors Seminar for PSY 121

1 Cr. Hr.

An academically accelerated introduction to the study of behavior, including theories, methods and research in the major areas of psychology. The course requires advanced written work, presentations and group discussion/activities. Topics include history, research, physiology of behavior, sensation, perception, consciousness, learning, memory, and personality theory.

Prerequisite(s): Concurrent registration for PSY 121. Permission of chairperson

124 Honors Seminar for PSY 122

1 Cr. Hr.

Topics include language and cognition, intelligence, motivation, emotion, life span development, stress and health, psychological disorders, and an overview of psychotherapy. An academically accelerated introduction to the study of behavior, including theories, methods and research in psychology, which requires advanced written work, presentations and group discussion/activities.

Prerequisite(s): PSY 121 concurrent registration for PSY 122. Permission of chairperson

126 Stress Management 3 Cr. Hrs.

An opportunity for experiential learning through application of diverse stress management techniques. Topics covered include: assertiveness, stress related personality factors, holistic health, relaxation techniques, communication patterns, cognitive restructuring and time management.

130 Effective Parenting 3 Cr. Hrs.

Techniques for effective parenting behavior; addressing issues and concerns confronting parents, exploring practical application of proven psychological approaches to resolving areas of conflict in the parent-child relationship. Relevant theoretical concepts from behavioral and humanistic psychology and recent research in the areas of childhood development are reviewed.

135 Living With Loss, Death & Grief

3 Cr. Hrs.

Integrates multidimensional aspects of living with loss and grief and covers experiences of loss, grief, imperatives for caregivers, cultural and religious differences in beliefs and practices, children's comprehension, experiences and adjustments to loss, legal and ethical issues.

140 Psychology of Interaction & Human Potential 3 Cr. Hrs.

Techniques for personal growth, helping relationships and more effective human interactions and covers congruent personality, modes of communication, determination of individual needs and purpose, assertiveness, conflict resolution, active listening, reality therapy and human encounter.

141 Love & Personal Growth 3 Cr. Hrs.

Research and theory concerning diverse scientific definitions of love and the development of love throughout the life cycle with special focus being given to communication styles, lifestyles, values, and mortality.

142 Self-Esteem: Building Life Skills

3 Cr. Hrs.

Theory and techniques to develop effective interpersonal relationships. Overview of self-esteem skills; application and evaluation of skills associated with solution options for interpersonal problems. A road map for success in building personal self-esteem, managing interpersonal relationships, and developing life skills to help achieve life goals.

145 Patterns of Human Relationships

3 Cr. Hrs.

Theoretical perspectives of traditional and non-traditional styles of relating and covers how psychological development affects choices of partners, effects of culture and historical age on relating, love/romance, power, jealousy, loneliness, fairness, equity theory, therapeutic interventions and sexuality.

159 Cross Cultural Psychology 3 Cr. Hrs.

Introduction to understanding cultural contexts of human behavior and thinking through experimental evidence; also includes classroom experiences and community involvement.

160 African-American Psychology

3 Cr. Hrs.

Multi-disciplinary study of theories, cultural themes and psychological constructs used to further promote understanding of thoughts, feelings and behaviors of African-Americans.

165 Sport & Exercise Psychology

4 Cr. Hrs.

Introductory course for novice or elite athletes, athletic trainers, coaches, or "weekend warriors" interested in enhancing their performance. Application of scientific principles of psychology to maximize performance in sporting events with emphasis on the practical application of theories to a variety of sports.

180 Psychology of Gender 3 Cr. Hrs.

Introduction to the basic theories and principles of the psychology of gender in a multicultural context. Perspectives of women and men of diverse cultural backgrounds are considered. Topics include gender stereotypes and social constructions, theories of gender development, biological and cognitive differences, and implications of gender for work, family, and mental and physical health.

205 Child Development 4 Cr. Hrs.

Research and theory concerning the physical, cognitive, and psychosocial development of children from conception to puberty. Covers the impact of genetic, prenatal and environmental factors and challenges appropriate to this age range. This course covers the same basic content as the first half of PSY 208.

Prerequisite(s): PSY 119 or PSY 122

206 Adolescent & Adult Psychology 3 Cr. Hrs.

Research and theory concerning physical, cognitive, social and psychological development from adolescence through old age. Focus is on developmental tasks and issues such as education, marriage, family, work, leisure and facing death.

Prerequisite(s): PSY 119 or PSY 122

207 Psychology of Aging 3 Cr. Hrs.

Research and theory concerning the physical, cognitive and social issues of aging.

Prerequisite(s): PSY 119 or PSY 122

208 Life Span Human Development 5 Cr. Hrs.

Research and theory concerning the physical, cognitive, and social development of a person from conception to death. The course covers conception, prenatal and child development issues, definition and tasks of adolescence, adult life crises, marriage, family, work, leisure and facing death.

Prerequisite(s): PSY 119 or PSY 122

214 Drugs & Behavior 4 Cr. Hrs.

Overview of the neuropharmacology of various psychoactive substances and their effects on physiology and behavior. Topics include basic principles of neurophysiology, neuropharmacology, and pharmacodynamics, including drug absorption, distribution, and elimination, physiology of tolerance and dependence, and ligand-receptor interactions.

Prerequisite(s): PSY 119 or PSY 121

217 Abnormal Psychology 4 Cr. Hrs.

A study of the diagnostic criteria, symptoms, causes, and treatments of the Diagnostic and Statistical Manual for Mental Disorders. Emphasis is on current scientific research.

Prerequisite(s): PSY 119 or PSY 122

218 Principles of Counseling 4 Cr. Hrs.

An introduction to professional issues in the helping profession of counseling with emphasis on the development of basic interviewing and counseling skills, a survey of classic and contemporary theories and techniques of the counseling process, and a comparison of various theoretical approaches.

Prerequisite(s): PSY 119 or PSY 122

220 Personality Psychology 4 Cr. Hrs.

An introduction to the bases of acquiring personality with emphasis on principles, theories, and research. Specific topics include psychodynamic theory, ego-psychology, object relations theory, trait/biological theory, phenomenology, behavior-environmental theory, and cognitive/self regulation theory.

Prerequisite(s): PSY 122 or PSY 119

223 Cognitive Psychology 4 Cr. Hrs.

A comprehensive review of the methods, theories, and principles associated with human mental processes such as information processing, parallel distributed processing, and neurocognitive perspectives on the interactions among mind, brain, and behavior. Specific topics include perception, attention, memory, language development, cognitive development, and intelligence.

Prerequisite(s): PSY 119 or PSY 122

225 Social Psychology 4 Cr. Hrs.

A study of the interaction between the individual and social environment, looked at through a multicultural context. Topics covered include: self-concept formation, attitudes, persuasion, attribution (inferences), group structure and processes, prejudice, aggression, and violence. Meets LAS multicultural studies requirement.

Prerequisite(s): PSY 119 or PSY 122

228 Psychology in the Work Place 4 Cr. Hrs.

The contributions of psychology to human resource management, organizational science, and human factors engineering are examined. The student will understand relevant theories and applications within organizational settings. Specific topics to be presented include motivation, group decision making and development, leadership, work place politics, employee selection, work related stress, performance evaluations, and organizational improvement.

Prerequisite(s): PSY 119 or PSY 122

229 Work Group Dynamics 3 Cr. Hrs.

This course examines work group structures and processes, and their influence on organizational and individual productivity. Students will apply psychological principles and methods to manufacturing, engineering, and other organizational environments in the lives of nearly all working people.

235 Research Methods for Social Sciences 4 Cr. Hrs.

An overview of basic research methods for the social sciences covering; experimental design, dependent and independent variables, experimental and control conditions, selection of subjects, data collection, and reading and writing research reports.

Prerequisite(s): PSY 119 or PSY 122

236 Behavioral Science Statistics 4 Cr. Hrs.

An exploration of basic statistical techniques used in behavioral sciences, including descriptive and inferential statistics, frequency distributions, measures of central tendency and distribution, non-parametric statistics, hypothesis testing, tests of significance and analysis of variance.

Prerequisite(s): PSY 235

242 Educational Psychology 4 Cr. Hrs.

Principles of learning and development applied in educational settings including research evidence to develop and provide effective learning experiences in various educational environments.

Prerequisite(s): PSY 119 or PSY 122

270 Psychology Internship R 1 - 6 Cr. Hrs.

Involvement in a field related experience outside the classroom setting, in which the learning outcomes and the form of evaluation will be determined by the supervising psychology instructor.

Prerequisite(s): PSY 119 or PSY 122

295 Independent Study in Psychology R 1 - 4 Cr. Hrs.

Students who have an identified interest in an area of psychology to explore that area in depth under faculty direction. Open only to second year students with a 3.0 average.

297 Special Topics in Psychology R 1 - 6 Cr. Hrs.

Opportunity to receive credit for non-traditional courses (TV and newspaper), workshops and special interest topics in the discipline of psychology.

Physical Therapist Assistant (PTA)

106 Introduction to Physical Therapy 1 Cr. Hr.

Purpose, philosophy, history and development of the physical therapy profession. PTA duties, PT/PTA relationship, essential functions, legal and ethical responsibilities and professional behaviors. Function of regulatory agencies, licensing bodies and professional associations.

107 Fundamentals of PTA Practice I 3 Cr. Hrs.

Scope and practice of the PTA. Introduction to human response, critical thinking, decision making and collaborative practice. Foundation in therapeutic communication, business practices, ethics and personal professional development.
Prerequisite(s): PTA 106 and restricted to majors

110 Fundamentals of PTA Practice II 2 Cr. Hrs.

Advanced principles related to scope and practice of the PTA, including human response, critical thinking, decision making and collaborative practice. Foundations of therapeutic communication and documentation with emphasis on medical terminology for the PTA.
Prerequisite(s): PTA 106 and restricted to majors

116 Movement Science I 5 Cr. Hrs.

Clinical kinesiology with emphasis on integration of anatomy, physiology, physics and geometry in relationship to human movement. Three lecture, four lab hours per week.
Prerequisite(s): BIO 142 and restricted to majors

117 Lab for PTA 116 Laboratory must be taken with PTA 116.

118 Movement Science II 5 Cr. Hrs.

Continuation of clinical kinesiology with emphasis on the effect of movement on posture, gait analysis, transfer techniques and body mechanics. Three lecture, four lab hours per week.
Prerequisite(s): PTA 116 and restricted to majors

119 Lab for PTA 118 Laboratory must be taken with PTA 118.

120 Pathology & Clinical Practice 5 Cr. Hrs.

Study of disease and pathology in body systems; psychological pathology signs and symptoms; pharmacology; diagnostic tests and values. Recognize and manage physiological response in body systems related to physical therapy interventions in commonly treated pathological conditions.
Prerequisite(s): PTA 106 and restricted to majors

124 Clinical Procedures I 5 Cr. Hrs.

Physiology and clinical rationale for use and application of treatment interventions including passive and mechanical physical agents, transfer techniques and gait training. Three lecture, four lab hours per week.
Prerequisite(s): PTA 118 or PTA 120 and restricted to majors

125 Lab for PTA 124 Laboratory must be taken with PTA 124.

130 Therapeutic Exercise I 4 Cr. Hrs.

Theory and clinical rationale for use and application of therapeutic exercise, functional activities with emphasis on case studies, advanced posture and gait and patient teaching in a variety of settings. Two lecture, four lab hours per week.
Prerequisite(s): PTA 118 and restricted to majors

131 Lab for PTA 130 Laboratory must be taken with PTA 130.

134 Tests & Measures 3 Cr. Hrs.

Application of standardized tests and measures including goniometry, manual muscle testing, cardiovascular and pulmonary response, balance and endurance. Understanding diagnostic procedures and tests. One lecture, six lab hours per week.
Prerequisite(s): PTA 118 and restricted to majors

137 Lab for PTA 134 Laboratory must be taken with PTA 134.

211 Clinical Practicum I 3 Cr. Hrs.

Introductory experience in the clinical setting under supervision of a PT or PTA clinical instructor. Application of theories and techniques for patient interventions, documentation and interdisciplinary interactions. Twenty-one practicum hours per week.
Prerequisite(s): PTA 223 and restricted to majors

212 Clinical Practicum II 3 Cr. Hrs.

Intermediate experience in the clinical setting under supervision of a PT or PTA clinical instructor. Application of theories and techniques for patient interventions, documentation and interdisciplinary interactions. Twenty-one practicum hours per week.
Prerequisite(s): PTA 211 and PTA 235 and PTA 233

213 Clinical Practicum III 3 Cr. Hrs.

Advanced experience in the clinical setting under supervision of a PT or PTA clinical instructor. Application of entry level performance including communication skills, problem solving, critical thinking and safety in therapeutic interventions. Twenty-one practicum hours per week.
Prerequisite(s): PTA 212

221 Clinical Procedures II 2 Cr. Hrs.

Physiology and clinical rationale for use and application of athermal and deep thermal physical agents. One lecture, two lab hours per week.
Prerequisite(s): PTA 124 and restricted to majors

222 Lab for PTA 221 Laboratory must be taken with PTA 221.

223 Therapeutic Exercise II 4 Cr. Hrs.

Advanced theory and rationale for use of therapeutic exercises and functional activities, recognition and treatment of orthopedic conditions, complex and specialized diagnoses across the life span (cardiovascular, pulmonary, obstetric, and endocrine disorders) as seen in PT practice. Two lecture, four lab per week.
Prerequisite(s): PTA 130 and restricted to majors

224 Lab for PTA 223 Laboratory must be taken with PTA 223.

226 Clinical Procedures III 3 Cr. Hrs.

Theory and clinical rationale for use and application of massage and soft tissue mobilization with emphasis on functional outcomes and patient education. One lecture, four lab hours per week.
Prerequisite(s): PTA 221 and restricted to majors

228 Lab for PTA 226 Laboratory must be taken with PTA 226.

230 Neuroscience for the Physical Therapist Assistant 2 Cr. Hrs.

Structure and function of the nervous system including interaction of the component parts. Changes in system across the life span and impact on human movement.
Prerequisite(s): PTA 223 and restricted to majors

233 Rehabilitation Skills 5 Cr. Hrs.

Therapeutic interventions for neurological, cardiovascular and pediatric pathologies. Wheelchair, orthotic and prosthetic use. Three lecture, four lab hours per week.
Prerequisite(s): PTA 230 and restricted to majors

234 Lab for PTA 233 Laboratory must be taken with PTA 233.

235 Practice Management 3 Cr. Hrs.

Study of management concepts, administrative skills and professional issues in the operation of a PT practice. Comprehensive review of curricular content.
Prerequisite(s): PTA 226 and restricted to majors

240 Clinical Procedures Review 1 Cr. Hr.

Comprehensive review of curricular content with required competency of technical skills.
Prerequisite(s): Restricted to majors and approval of chairperson

Purchasing (PUR)

201 Purchasing Principles 3 Cr. Hrs.

The contribution of the purchasing organization within the firm; development of sources of supply; purchasing procedures, policies, and techniques. Basic functions of procurement and materials management common to manufacturing, service, and government organizations.

202 Advanced Purchasing 3 Cr. Hrs.

In-depth approaches to actual situations encountered by purchasing personnel: quality; pricing; types of contracts, international purchasing and the more challenging aspects of government purchasing.

Prerequisite(s): PUR 201, MAT 116 or MAT 121

206 Seminar in Purchasing 3 Cr. Hrs.

Methods and tools unique to planning, evaluating, and controlling a proactive purchasing department; selection and management of purchasing personnel and their professional development; purchasing research and purchase timing alternatives.

Prerequisite(s): PUR 202

210 Just-in-Time (JIT) Inventory Techniques 3 Cr. Hrs.

Development of Just-In-Time (JIT) manufacturing applications in the United States through present day setup and operation of JIT systems, Total Quality Control, Continuous Improvement, and a comparison of JIT with Materials Requirements Planning (MRP); supplier/transportation partnerships and functional integration.

Prerequisite(s): PUR 201 or MAN 251

215 Inventory & Production Control 3 Cr. Hrs.

The role of inventory and production control in modern industrial management with emphasis on data processing, MRP centralized control, standardization, obsolescence control and other modern techniques.

Prerequisite(s): MAT 101 and PUR 201

220 Supplier Relationships 3 Cr. Hrs.

Overview of determining vendor capability by sourcing/certification, and state-of-the-art approaches to supply chain management and auditing; role and impact of supplier relationships.

225 Negotiation Techniques 3 Cr. Hrs.

Psychology and techniques of conducting purchasing negotiations; mock negotiations using case studies. Principles apply to situations in personal life. Class is open to non-purchasing students.

270 Purchasing Internship R 1 - 9 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

297 Special Topics in Purchasing R 0.5 - 6 Cr. Hrs.

Special interest content within the discipline as well as instruction delivered in a non-traditional format such as TV or videotape.

Quality Engineering Technology (QET)

100 Tooling & Machining Metrology 2 Cr. Hrs.

Various measurement techniques involving shop measuring instruments; correct use and care of basic inspection instruments; interpretation of blueprints as well as evaluation of machined products related to engineering needs. One lecture, three lab hours per week.

101 Survey of Total Quality 2 Cr. Hrs.

Basic principles, concepts and philosophy of total quality. Extensive use of teamwork, problem solving activities and tools. Two lecture hours per week.

Prerequisite(s): MET 198

Co-requisite: QET 171 (lab for QET 101)

105 Packaging Concepts & Materials 3 Cr. Hrs.

Functions of commercial, industrial and military packaging; aesthetic, technical, cost, and environmental factors in package selection and design. Laboratory testing of packaging materials including paper, corrugated, paperboard, and films using appropriate ASTM and TAPPI standards. Two lecture, two lab hours per week.

Prerequisite(s): DEV 108 or equivalent

107 Engineering Disasters 1 Cr. Hr.

A study of engineering disasters and their underlying causes. Discussion of the concept of acceptable risk. Introduction and use of a simple problem solving tool, Fault Tree Analysis. Small group discussion.

113 Coordinate Measurement 3 Cr. Hrs.

Introduction to coordinate measurement instruments and GD&T principles as applied to measurements. Two lecture, two lab hours per week.

Prerequisite(s): QET 100 or QET 112 and DRT 100 and DRT 106 or DRT 196 and INT 143 or MAT 131

114 Advanced Coordinate Measurement 3 Cr. Hrs.

Operating techniques and practice for a computer-aided servo driven coordinate measurement machine. Two lecture, two lab hours per week.

Prerequisite(s): QET 113

117 Advanced Quality & Inspection 3 Cr. Hrs.

Advanced concepts of dimensional metrology, including calibration, coefficient of thermal expansion, functional gauging, Geometric Dimensioning and Tolerancing (GD&T) as applied to gauging and fixturing, inspection plans, statistical process control, and problem analysis. Advanced measuring tools will be introduced. Two lecture, two lab hours per week.

Prerequisite(s): QET 112 or equivalent.

Permission of department chairperson

120 Process Metrology 3 Cr. Hrs.

Fundamental methods, standards, processes and procedures for measurement and non-destructive testing based upon physical and standards of length, time, temperature, pressure and electricity. Two lecture, two lab hours per week.

Prerequisite(s): DEV 108 and DEV 065 or equivalent

123 Eddy Current Testing 2 Cr. Hrs.

Introduction to non-destructive testing pertaining to eddy current testing with applications as outlined in ASNT-TC-1A of the American Society of Non-Destructive Testing (ASNT) requirements. One lecture, three lab hours per week.

Prerequisite(s): QET 120

124 Industrial Radiography 3 Cr. Hrs.

Radiographic techniques including X-ray, gamma and dark room procedures, as well as radiographic interpretations are introduced. Two lecture, two lab hours per week.

Prerequisite(s): DEV 108 or equivalent

125 Ultrasonic Testing 3 Cr. Hrs.

Review of fundamental of sound and wave propagation, basis of ultrasonic testing including principles and operations of test equipment. Two lecture, two lab hours per week.

Prerequisite(s): QET 120

126 Liquid Penetrant/ Magnetic Particle Testing 3 Cr. Hrs.

Introduction to non-destructive testing methods utilizing liquid penetrant and magnetic particle testing with laboratory applications as outlined in ASNT-TC-1A of the American Society for Non-Destructive Testing (ASNT) requirements. Two lecture, two lab hours per week.

Prerequisite(s): DEV 108 or permission of instructor

131 Fundamentals of Metallurgy & Material Science 3 Cr. Hrs.

A review of the elements of chemistry and physics as they apply to the properties and characteristics of engineering materials. Mechanical and physical properties of metals, and plastics. Two lecture, two lab hours per week.
Prerequisite(s): MAT 101 or INT 141 or equivalent

132 Metallurgy 2 Cr. Hrs.

Terminology, designations of metals and the relationship among the properties of metals, the environment, and heat treatment processes. Selecting and testing materials. Two lecture hours per week.
Prerequisite(s): MET 104 or QET M30 and PHY 131 or PHY 141
Co-requisite: QET 173 (lab for QET 132)

133 Non-Metallic Materials & Processes 2 Cr. Hrs.

Factors related to the selection of non-metallic materials and the relationship between the nature of the materials and their properties. Thermoplastics, thermosetting, composites and glasses are included. Two lecture hours per week.
Prerequisite(s): MET 104 or QET M30
Co-requisite: QET 174 (lab for QET 133)

171 Lab for QET 101 1 Cr. Hr.

Co-requisite laboratory course to the lecture course QET 101, Survey of Total Quality. Two lab hours per week.
Co-requisite: QET 101

173 Lab for QET 132 1 Cr. Hr.

Laboratory activities to supplement QET 132: Metallurgy. Three lab hours per week.
Co-requisite: QET 132

174 Lab for QET 133 1 Cr. Hr.

Laboratory activities to supplement QET 133: Non-Metallic Materials and Processes. Two lab hours per week.
Co-requisite: QET 133

181 Lab for QET 201 1 Cr. Hr.

Laboratory activities for QET 201: Statistical Process Control. Two lecture hours per week.
Co-requisite: QET 201

182 Lab for QET 202 1 Cr. Hr.

Laboratory activities to supplement QET 202: Advanced Statistical Quality Control. Three lab hours per week.
Co-requisite: QET 202

183 Lab for QET 221 1 Cr. Hr.

Laboratory activities to supplement QET 221: Quality Assurance. Three lab hours per week.
Co-requisite: QET 221

184 Lab for QET 261 1 Cr. Hr.

Laboratory activities to supplement QET 261: Continuous Process Improvement. Three lab hours per week.
Co-requisite: QET 261

185 Lab for QET 217 1 Cr. Hr.

Laboratory activities to supplement QET 217: Measurement and Calibration. Two lab hours per week.
Co-requisite: QET 217

190 Quality Control Workshop R 0.5 - 3 Cr. Hrs.

Various topics related to Quality Control.

200 Quality Technician Review R 2 Cr. Hrs.

Review of the core requirements and topics covered by the various technician exams offered by the American Society for Quality (ASQ). This course should be taken concurrently with an accompanying technical certification, such as QET 266, 267, 268 or 269.

201 Statistical Process Control 2 Cr. Hrs.

A continuation of the introductory quality course (QET 101) with emphasis on process capability, control charts techniques, and analysis. Two lecture hours per week.
Prerequisite(s): QET 101 and MAT 101 or INT 141
Co-requisite: QET 181 (lab for QET 201)

202 Advanced Statistical Quality Control 3 Cr. Hrs.

Applications of statistical quality control methods including hypothesis testing, design of experiments and analysis, single factor experiments, factorial experiments, confidence limits, and linear regression analysis. Three lecture hours per week.
Prerequisite(s): QET 201 and MAT 132 or MAT 10
Co-requisite: QET 182 (lab for QET 202)

211 Design & Process Failure Modes & Effects Analyses 2 Cr. Hrs.

Application of the reliability prediction techniques including fault tree, design and process Failure Mode and Effects Analyses (FMEA), and reliability block diagrams. One lecture, two lab hours per week.
Prerequisite(s): MET 104

212 Reliability Testing & Analysis 2 Cr. Hrs.

Reliability testing and failure analysis including: exponential, normal, and weibull distributions. Application of accelerated life testing. One lecture, two lab hours per week.
Prerequisite(s): QET 211 and QET 201 or MAT 122

215 Certified Reliability Engineering Review R 1 Cr. Hr.

Review of the requirements and topics to become certified by the American Society for Quality (ASQ) as a Certified Reliability Engineer (CRE) with emphasis on previous preparation efforts. This course should be taken with QET 285. Two lab hours per week.

217 Measurement & Calibration 2 Cr. Hrs.

Selection of appropriate measurement tools, gauge R&R, calibration and certification of linear measuring tools, and development and testing of control and inspection plans. Two lecture hours per week.

Prerequisite(s): QET 100 and QET 201 and QET 113 or DRT 217
Co-requisite: QET 185 (lab for QET 217)

221 Quality Assurance 3 Cr. Hrs.

Applying quality systems based on ISO 9001, 9004, 16949 or Malcolm Baldrige requirements, to improve customer relations, supply chain management, and to define the appropriate financial reporting system, including performance measures such as quality costs. Three lecture hours per week.

Prerequisite(s): QET 201
Co-requisite: QET 183 (lab for QET 221)

223 ISO 9000/16949 Quality Systems 3 Cr. Hrs.

Review of the ISO 9000:2000 and ISO 16949 standards, requirements, and implementation strategies.

224 ISO 9000/16949 Documentation 3 Cr. Hrs.

Practice in the defining and writing of quality procedures that meets ISO 9001/16949 requirements. Extensive use of word processing templates designed for the writing of procedures. Includes discussion and linkage to the other three levels of documentation. Two lecture, two lab hours per week.
Prerequisite(s): QET 223 and MET 198 or permission of instructor

225 Certified Quality Engineering Review R 1 Cr. Hr.

Review of the requirements and topics to become certified by the American Society for Quality as a Certified Quality Engineer (CQE) with emphasis on previous preparation. This course should be taken with QET 285. Two lab hours per week.

231 ISO 9000/16949 Internal Auditor 3 Cr. Hrs.

Needs, requirements and practice in the development and implementation of an internal auditing program in an ISO 9000/16949 compliant organization.
Prerequisite(s): QET 223 or permission of instructor

235 Certified Quality Auditor Review 1 Cr. Hr.

Audit function, nature of audits, and evaluation of corrective action. Review of the requirements and topics to become certified by the American Society for Quality (ASQ) as a Certified Quality Auditor (CQA). This course should be taken with QET 285. Two lab hours per week.

245 Certified Quality Manager Review
1 Cr. Hr.

Review of the requirements and topics to become certified by the American Society for Quality (ASQ) as Certified Quality Manager (CQM) with emphasis on previous preparation. This course should be taken with QET 285. Two lab hours per week.

250 Packaging Systems 3 Cr. Hrs.

Application of the total systems analysis concept to packaging. Identification of all elements in the decision process for package design, including product fragility, severity of the distribution system, material handling and transportation, production costs, product liability, and environmental impact.

Prerequisite(s): PHY 131 and QET 134 and QET 212

252 Packaging Development 3 Cr. Hrs.

Principles of container design. Engineering design concepts including human factors and consumer psychology; quality control, economics, and specification development for glass, metal, paper, plastic, and composite packaging. Two lecture, two lab hours per week.

Prerequisite(s): QET 105 and QET 134 and QET 212

254 Package Shock & Vibration
3 Cr. Hrs.

The physics of shock, vibration, and compression as they relate to product damage in handling and shipment. Mechanical properties of cushioning and dampening materials, lowest cost protective shipping container design. Standardized performance testing for product fragility and protective package effectiveness. Two lecture, two lab hours per week.

Prerequisite(s): QET 212 and QET 250

261 Continuous Process Improvement
2 Cr. Hrs.

Selection and application of the appropriate problem solving models and tools for the improvement of process quality, throughput and waste reduction. Two lecture hours per week.

Prerequisite(s): QET 201 and QET 221 and IET 130 and QET 202 or MAT 220

Co-requisite: QET 184 (lab for QET 261)

265 Certified Software Quality Engineer Review R 1 Cr. Hr.

Review of the requirements and topics to become certified by the American Society for Quality (ASQ) as a Certified Software Quality Engineer (CSQE) with emphasis on previous preparation. This course should be taken with QET 285. Two lab hours per week.

266 Certified Calibration Technician Review R 1 Cr. Hr.

Review of the topics to become certified by the American Society for Quality (ASQ) as a Certified Calibration Technician (CCT). This course should be taken with QET 200. Two lab hours per week.

Prerequisite(s): QET 120 and QET 217

267 Certified Mechanical Inspector Review R 1 Cr. Hr.

Review of the topics to become certified by the American Society for Quality (ASQ) as a Certified Mechanical Inspector (CMI). This course should be taken with QET 200. Two lab hours per week.

Prerequisite(s): QET 101 and QET 100

268 Certified Quality Improvement Associate Review R 1 Cr. Hr.

Review of the topics to become certified by the American Society for Quality (ASQ) as a Certified Quality Improvement Associate (CQIA). This course should be taken with QET 200. Two lab hours per week.

Prerequisite(s): QET 101

269 Certified Quality Technician Review R 1 Cr. Hr.

Review of the topics to become certified by the American Society for Quality (ASQ) as a Certified Quality Technician (CQT). This course should be taken with QET 200. Two lab hours per week.

Prerequisite(s): QET 223 and QET 201 and QET 100

270 Quality Control Internship R 1 - 12 Cr. Hrs.

Preparing a portfolio based on work related/on-the-job experience.

285 Quality Engineering & Quality Management Certification Review
2 Cr. Hrs.

Review of the requirements and topics to become certified as an American Society of Quality (ASQ) professional. This course should be taken concurrently with an accompanying technical certification, such as QET 215, 225, 235, 245, or 265.

295 Quality Engineering Technology Capstone 3 Cr. Hrs.

The student plans, implements an improvement project within the context of work or the community. A systems approach to managing organizational change is studied

Prerequisite(s): QET 202 and QET 211 and QET 221 and ENG 122 and permission of the instructor

297 Special Topics in Quality Engineering Technology R 1 - 6 Cr. Hrs.

Varied content offerings of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom seminar setting or in a non-traditional format such as television, videotape, etc.

M30 Introduction to Materials & Manufacturing Processes 1 Cr. Hr.

Explore and analyze the way products are made and linked to the selection of the appropriate material. Application of an established taxonomy of manufacturing process to various products.

Radiologic Technology (RAT)**104 Radiographic Principles for the General Machine Operator**
4 Cr. Hrs.

Introduction to radiographic imaging principles including basic patient positioning, radiation biology, safety and physics, image production and film processing. Three lecture, two lab hours per week.

Prerequisite(s): BIO 107 and HIM 121

105 Lab for RAT 104

Laboratory must be taken with RAT 104.

111 Clinical Competency Development I
4 Cr. Hrs.

Orientation to hospital and radiology organization, radiographic procedures involved with the skeletal system, respiratory tract, and abdomen; introduction to competency performance, film analysis and presentation. Sixteen clinical hours per week.

Prerequisite(s): RAT 121

112 Clinical Competency Development II
4 Cr. Hrs.

Continuation of clinical competency development involved with skeletal and chest radiography with emphasis on gastrointestinal, biliary, and urographic procedures. Sixteen clinical hours per week.

Prerequisite(s): RAT 111

121 Introduction to Radiography & Positioning 4 Cr. Hrs.

Orientation to the field of radiography, history, x-ray production, image production, positioning upper extremities and chest. Three lecture, two lab hours per week.

Prerequisite(s): Admission to program

122 Radiographic Positioning 4 Cr. Hrs.

Radiographic positioning of the lower extremities and axial skeleton; patient interactions and film analysis. Three lecture, two lab hours per week.

Prerequisite(s): RAT 121

123 Fluoroscopy in Radiography
5 Cr. Hrs.

Positioning and procedures involved in gastrointestinal, genitourinary systems; fluoroscopy; use of contrast medias, reactions and technical considerations. Four lecture, two lab hours per week.

Prerequisite(s): RAT 122

127 Lab for RAT 121

Laboratory must be taken with RAT 121.

128 Lab for RAT 122*Laboratory must be taken with RAT 122.***129 Lab for RAT 123***Laboratory must be taken with RAT 123.***131 Patient Care in Radiography****2 Cr. Hrs.**

Legal and professional aspects, infection control, patient safety and assessment techniques related to care of the patient in radiography department. One lecture, two lab hours per week.

*Prerequisite(s): Admission to program***132 Ethics & Law in Medical Imaging****2 Cr. Hrs.**

The historical and philosophical basis of ethics, elements of ethical behavior and practical dilemmas, concepts of law and legal principles including professional standards and scopes of practice.

*Prerequisite(s): RAT 131. Restricted to RAT majors***137 Lab for RAT 131***Laboratory must be taken with RAT 131.***199 Computers in Medical Imaging****2 Cr. Hrs.**

Overview of computers in medical imaging including hardware, software, peripheral devices. Its use in CT, MR, digital imaging, computer-aided diagnosis, plus information and image management (PACS).

*Prerequisite(s): RAT 123 or permission of chairperson***212 Clinical Competency Development III****6 Cr. Hrs.**

Continuation of clinical competency development with emphasis in mobile radiography, pediatrics, alternative rotation experience, formulating technique and film critique. Twenty-four clinical hours per week.

*Prerequisite(s): RAT 112***213 Clinical Competency Development IV****8 Cr. Hrs.**

Clinical development opportunity continues including an alternative schedule experience, elective rotations in special imaging modalities; competency development in fluoroscopy, general and mobile radiography. Thirty-two clinical hours per week.

*Prerequisite(s): RAT 212***214 Clinical Education Development Capstone****4 Cr. Hrs.**

Total exposure to the hospital environment and all functions performed by entry-level radiographers; completion of final clinical competency assessments. Twenty-four clinical hours per week.

*Prerequisite(s): RAT 213***215 Pathology for Radiographers****2 Cr. Hrs.**

Radiographic appearance of diseases and technique adjustments for both additive and destructive pathologies.

*Prerequisite(s): RAT 123***218 Advanced Radiographic Practice****3 Cr. Hrs.**

Specialty practice considerations related to geriatrics, pediatrics, mobile, surgical and trauma radiography.

*Prerequisite(s): RAT 123***219 Pharmacology for Radiographers****1 Cr. Hr.**

General pharmacological principles as they pertain to the practice of radiography. Emphasis placed on major drug classes prescribed medically as well as those having specific indications in radiology.

*Prerequisite(s): RAT 123***222 Principles of Radiographic Techniques****5 Cr. Hrs.**

Principles of exposure formulation, image quality factors and variables, quality assurance and testing, film and image processing. Four lecture, two lab hour per week.

*Prerequisite(s): RAT 123***226 Synopsis in Radiography****2 Cr. Hrs.**

Testing and preparation for the national registry examination. Synthesizing current knowledge in radiologic technology applicable to fluoroscopic, general and mobile radiography.

227 Lab for RAT 222*Laboratory must be taken with RAT 222.***229 Quality Management in Medical Imaging****1 Cr. Hr.**

Basic principles and concepts of quality management and overview of quality assurance testing applicable to the radiographic system.

*Prerequisite(s): RAT 222, restricted to RAT majors***231 Sectional Anatomy****2 Cr. Hrs.**

Human gross anatomy analyzing structures in the transverse (axial), sagittal, and coronal planes, with applications in modern medical imaging.

*Prerequisite(s): BIO 132***232 Radiation Biology****2 Cr. Hrs.**

Fundamental principles of molecular and cellular effects of x-ray interaction, health physics and radiation protection.

*Prerequisite(s): RAT 222***237 Lab for RAT 231***Laboratory must be taken with RAT 231.***240 Computed Tomography Practicum****R 2 - 6 Cr. Hrs.**

A variable credit clinical experience performing actual patient exams involving computer tomography.

*Prerequisite(s): RAT 199 and RAT 231***241 Principles of Computed Tomography****4 Cr. Hrs.**

Basic instrumentation and application concepts including computer and x-ray unit components and their application to protocols for acquiring sectional images of various body systems.

*Prerequisite(s): RAT 199 and RAT 231***243 Principles of Magnetic Resonance Imaging (MRI)****4 Cr. Hrs.**

Basic physics concepts involving the generation and construction of human planar images using magnetic resonance imaging technology.

244 Magnetic Resonance Imaging (MRI) Applications**4 Cr. Hrs.**

Magnetic resonance imaging procedures including patient preparation, positioning, filming protocol, instrumentation and archiving.

*Prerequisite(s): RAT 243***245 Magnetic Resonance Imaging Practicum****R 2 - 8 Cr. Hrs.**

Variable credit clinical experience performing actual patient exams involving magnetic resonance imaging.

*Prerequisite(s): RAT 199 and RAT 231***247 Mammographic Principles****3 Cr. Hrs.**

Comprehensive overview of mammography concepts, including patient care and education; breast anatomy, physiology, epidemiology, and pathology; positioning techniques; interventional procedures; and mammographic findings.

*Prerequisite(s): Permission of chairperson required***248 Mammographic Equipment & Applications****2 Cr. Hrs.**

Mammographic equipment concepts including x-ray tube considerations, imaging media and processing, quality assurance testing and exposure principles.

*Prerequisite(s): Permission of chairperson required***249 Mammographic Practicum****R 2 Cr. Hrs.**

Clinical experience in a mammography facility performing all functions including routine and special mammographic procedures, quality assurance testing and image analysis.

*Prerequisite(s): Permission of chairperson required***250 Quality Management in Radiography****3 Cr. Hrs.**

Fundamental and advanced quality management practices in the medical imaging sciences to include film, film processors, imaging equipment and accessories. One lecture and four lab hours per week.

261 Radiography Practicum**R 2 - 8 Cr. Hrs.**

Clinical experience involving a variety of patient procedures. Experiences include, but are not limited to, fluoroscopy, mobile and general radiography.

Prerequisite(s): Permission of chairperson required

265 Seminar in Radiology**R 1 - 3 Cr. Hrs.**

Current issues and developments in radiologic technology. Case studies of selected topics.

Prerequisite(s): Permission of chairperson required

Religious Studies (REL)**111 Eastern Religions 3 Cr. Hrs.**

An introduction to Far Eastern religious traditions, focusing on Hinduism, Buddhism, Confucianism, and Taoism.

112 Western Religions 3 Cr. Hrs.

An introduction to religions originating in the Near East, focusing on Judaism, Christianity, and Islam.

135 American Religious Movements**3 Cr. Hrs.**

What makes certain religious movements uniquely American.

204 Great Books: The Bible & Western Culture**3 Cr. Hrs.**

An exploration of how and why the Bible is viewed as a "great book." Both the Old and New Testaments will be explored in their respective historical contexts. Connections with and influences upon Literature Art, Politics, Economics, Medicine, Music, Women's Issues, and Religion itself are examined.

297 Special Topics in Religion**R 1 - 6 Cr. Hrs.**

Varied content offerings of special interest to the discipline but not covered within existing courses; may be scheduled in a classroom/seminar setting or in a non-traditional format such as television, videotape, etc.

Real Estate (RES)**121 Real Estate Abstracting I 3 Cr. Hrs.**

Recorded documents affecting real estate, terms used in abstracting and the function of public offices in the abstracting process.

122 Real Estate Abstracting II 3 Cr. Hrs.

Liens, mortgages, foreclosure, divorce, wills and estates proceedings are examined as they relate to real property and the abstracting process.

Prerequisite(s): RES 121

201 Real Estate Principles & Practices**4 Cr. Hrs.**

Areas encompassed in the real estate sales industry. The market, investment and brokerage areas and contractual and property rights which concern both the real estate practitioner and investor consumer.

202 Real Estate Law 4 Cr. Hrs.

The legal phases of a realty transaction. Examined are types of estates in land, co-ownership, mortgages, Ohio license law and landlord-tenant law.

203 Real Estate Finance 2 Cr. Hrs.

The institutions, methods, instruments and procedures involved in the financing of real estate. Nature of mortgage market and effects of government monetary or fiscal policies are considered.

204 Real Estate Appraisal for Realtors**2 Cr. Hrs.**

Methodology of appraising urban property, three basic techniques of appraising and the theory underlying these techniques.

205 Real Estate Appraisal II 4 Cr. Hrs.

Income capitalization in appraising income producing property and functions which influence value of non-residential property.

Prerequisite(s): RES 204

210 Real Estate Practice Seminar**3 Cr. Hrs.**

Apply knowledge and practice skills acquired in real estate courses concerning principles, law, finance, and appraisal through the use of case studies, simulations, and role playing.

Prerequisite(s): RES 201, RES 202, RES 203, RES 204

215 Real Estate Investing 3 Cr. Hrs.

An analytical approach to investment in real estate. Financing, tax considerations, appraisal, internal rate of return, acquisitions and exchanges. Highlighted are problems requiring investment analysis.

221 Property Management 3 Cr. Hrs.

Management of residential, business, and commercial properties. Topics presented are merchandising, public relations, leasing, accounting and insurance.

270 Real Estate Internship**R 1 - 9 Cr. Hrs.**

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

278 Real Estate Capstone 1 Cr. Hr.

Revisit knowledge and skills acquired in real estate abstracting, commercial appraisal, investing, and property management through development and submission of research papers.

Prerequisite(s): RES 121, RES 122, RES 201, RES 202, RES 203, RES 204, RES 205, RES 210 and RES 221

297 Special Topics in Real Estate**R 1 - 6 Cr. Hrs.**

Provides opportunity to receive credit for non-traditional courses or approaches to learning, career related courses/opportunities, and service learning courses/activities, including special interest topics, workshops or customized training.

Respiratory Care (RET)**110 Respiratory Therapeutics I 5 Cr. Hrs.**

Respiratory care theory, procedures, and equipment to include: applied principles of physics, pulmonary assessment, oxygen therapy and appliances, humidity and aerosol therapy and equipment, sustained maximal inspiration therapy and a review of theory and procedures acquired in ALH 106 as they apply to respiratory care and entry into the clinical setting. Four lecture, three lab hours per week.

Prerequisite(s): ALH 106

111 Lab for RET 110

Laboratory must be taken with RET 110.

118 Cardiopulmonary Rehabilitation**1 Cr. Hr.**

Basic principles of patient selection, program components, goals, sequencing, equipment, outcomes, and reimbursement of cardiac and pulmonary rehabilitation programs.

Prerequisite(s): DEV 065

120 Respiratory Therapeutics II**4 Cr. Hrs.**

Theory, application, equipment, and skill development of procedures required for clinical practice including medicinal aerosol therapy, bronchopulmonary hygiene, suctioning, positive pressure inflation techniques, non-invasive monitoring, and resuscitation techniques. Three lecture, three lab hours per week.

Prerequisite(s): RET 110

121 Lab for RET 120

Laboratory must be taken with RET 120.

130 Cardiopulmonary Disease Processes 4 Cr. Hrs.

Diseases and disorders affecting the cardiopulmonary systems emphasizing diagnosis, selection and implementation of therapeutic modalities, and the role of the respiratory care practitioner in treatment.
Prerequisite(s): RET 120

140 Adjuncts to Respiratory Care 11 Cr. Hr.

Theory and application of procedures and diagnostic tests utilized in their treatment of critically ill patients including intermittent positive pressure breathing, BiPAP, intrapulmonic percussive ventilation, cleaning and sterilization of equipment, principles of fluidics, home care, pulmonary rehabilitation and an introduction to mechanical ventilation. Two lecture, three lab and 24 clinical hours per week.
Prerequisite(s): RET 120

141 Lab for RET 140

Laboratory must be taken with RET 140.

142 Clinical for RET 140

Clinical must be taken with RET 140.

146 Clinical Practice 4 Cr. Hrs.

Continued clinical practice of routine respiratory care procedures and introduction to respiratory care speciality areas of airway care, home care, pulmonary rehabilitation, and critical care.
Prerequisite(s): RET 140

224 Cardiopulmonary Pharmacology 3 Cr. Hrs.

Actions, effects, dosages, and indications for drug classes commonly used to treat pulmonary and cardiovascular diseases.
Prerequisite(s): RET 110

230 Respiratory Critical Care I 10 Cr. Hrs.

Ventilator selection, support techniques, monitoring, discontinuance, therapeutic application and clinical application of blood gases. Four lecture, three lab, fifteen clinical hours per week.
Prerequisite(s): RET 140 or permission of department chairperson

231 Lab for RET 230

Laboratory must be taken with RET 230.

232 Clinical for RET 230

Clinical must be taken with RET 230.

240 Respiratory Critical Care II 10 Cr. Hrs.

Advanced respiratory care of critically ill pediatric and adult patients focusing on medical and surgical conditions that require intensive cardiopulmonary monitoring and therapeutic care. Four lecture, three lab, fifteen clinical hours per week.
Prerequisite(s): RET 230 or permission of department chairperson

241 Lab for RET 240

Laboratory must be taken with RET 240.

242 Clinical for RET 240

Clinical must be taken with RET 240.

250 Pediatrics & Neonatology 3 Cr. Hrs.

Development of the fetus, anticipation of high-risk pregnancies and evaluation and care of the newborn infant emphasizing neonatal and pediatric pulmonary physiology and disease. Two and one-quarter lecture, one and one-half lab hours per week.

Prerequisite(s): RET 230

251 Lab for RET 250

Laboratory must be taken with RET 250.

260 Assessment of Pulmonary Function 3 Cr. Hrs.

Advanced pulmonary physiology and pathology as it relates to pulmonary function testing and interpretation emphasizing performance of testing protocols, interpretation of results, equipment maintenance and quality assurance, computer applications, special procedures, and preparation for the national board examination for certification as a pulmonary function technologist. Two and one-half lecture, one and one-half lab hours per week.

Prerequisite(s): RET 240

261 Lab for RET 260

Laboratory must be taken with RET 260.

280 Correlations in Respiratory Care 6 Cr. Hrs.

Correlation of respiratory care theory, principles and procedures to the patient care setting emphasizing evaluation and implementation of appropriate patient care plans; mock national board examinations. One lecture, fifteen clinical hours per week.

Prerequisite(s): RET 240

282 Lab for RET 280

Laboratory must be taken with RET 280.

297 Special Topics in Respiratory Care R 0.2 - 6 Cr. Hrs.

Provides opportunities to receive credit for non-traditional courses as well as special interest topics within the discipline. Repeatable for credit as topic/issues changes. Approved for Continuing Respiratory Care Education (CRCE) credit.

M01 Durable Medical Equipment R 2 Cr. Hrs.

Assembly and application of durable medical equipment, and appropriate use of universal precautions, body mechanics and environmental safety in the home care setting.

Prerequisite(s): High school graduate or GED; signature of chairperson

M02 Driver Safety for Home Care Oxygen R 1 Cr. Hr.

Safety issues pertinent to the delivery and use of liquid and cylinder oxygen in the home care setting.

Prerequisite(s): High school graduate or GED; signature of chairperson

M03 Driver Safety for Hazardous Materials R 0.5 Cr. Hrs.

Driver safety issues pertinent to transporting hazardous materials and the commercial driver license (CDL) hazmat examination.

Prerequisite(s): High school graduate or GED; signature of chairperson

M04 Guidelines for Oxygen Safety R 2.5 Cr. Hrs.

Application of federal regulations for oxygen safety, storage, labeling, tracking, and transfilling.

Prerequisite(s): High school graduate or GED; signature of chairperson

M05 Home Care Oxygen Systems R 1 Cr. Hr.

Application and troubleshooting of oxygen delivery systems in the home care setting.

Prerequisite(s): High school graduate or GED; signature of chairperson

M06 Practicum for Home Medical Equipment R 1 Cr. Hr.

Hands-on experience with durable medical equipment and common home care oxygen equipment in the industry.

Prerequisite(s): RET M01 and RET M02 and RET M03 and RET M04 and RET M05. High school graduate or GED; signature of chairperson

Russian (RUS)**100 Conversational Russian 3 Cr. Hrs.**

Understanding and speaking in conversational settings, using knowledge of Russian-speaking cultures.

Sociology (SOC)

111 General Sociology I 3 Cr. Hrs.

A critical analysis of dynamics between human behavior and society through the use of the scientific method and data analysis. Topics will include culture, socialization, the nature of groups, deviance and social inequalities.

112 General Sociology II 3 Cr. Hrs.

Analysis of contemporary American society, focusing on the social institutions of family, education, religion, government, economics, collective behavior, social change, population and urbanization.

Prerequisite(s): SOC 111

114 Courtship & Marriage 3 Cr. Hrs.

Courtship, dating, and marriage; realities surrounding affectional relationships and marital conflict. Budget planning, buying insurance, writing a will, and purchasing a home. Divorce, remarriage and step-parenthood.

Prerequisite(s): SOC 111 or SOC 120

115 Today's Changing Family 4 Cr. Hrs.

The developmental stages of the family life cycle from the childless couple through death or divorce, family issues and problems.

Prerequisite(s): SOC 111 or SOC 120

117 Popular Culture 3 Cr. Hrs.

Exploration of popular culture in the last half of this century with projected trends; examination of influence of popular culture on the development of a unique American society and culture through media, music, sports, entertainment.

118 Appalachian Families 3 Cr. Hrs.

A critical examination of the Appalachian experience from the 1700s through the present day with emphasis on the Appalachian family (both rural and urban) as a varied and complex social system.

119 Diversity in Appalachia 3 Cr. Hrs.

Examination of the diverse populations within the Appalachian region. Historical and current overview of the significant social, political, intellectual, cultural, and educational themes impacting the diversity of rural and urban Appalachia.

120 General Sociology 5 Cr. Hrs.

Analysis of contemporary American society with review of major sociological theories, research methods, culture, socialization, groups, social structure, social institutions, deviancy, social inequalities, social processes, and social change. Not open to students with SOC 111.

125 Drug Implications 3 Cr. Hrs.

Use, misuse and abuse of the most common drugs, emphasizing extent, effects, prevention and treatment.

130 Family Violence 3 Cr. Hrs.

The nature of family violence: child abuse, abuse of elderly parents, sexual abuse, incest, marital rape, marital violence, effects of family violence, and societal reactions to family violence. Also offered as LEP 130; students may enroll in either course, but not both.

Prerequisite(s): SOC 111 or SOC 120

145 Comparing Cultures 3 Cr. Hrs.

Cultural anthropology, including cultural evolution, similarities and differences among world cultures, comparative analysis of family organization, religious beliefs, educational systems, economics and governmental systems.

160 Social Patterns in Aging 3 Cr. Hrs.

Orientation to the biological, sociological, and psychological dimensions of the aging process, and society's response to its older members and their social problems.

Prerequisite(s): SOC 111 or SOC 120

205 Social Problems 4 Cr. Hrs.

Causes, treatment and prevention of such societal problems as mental illness, inadequate health care, alcohol and drug abuse, violence, crime, delinquency, inequality, aging, family breakdown and environmental concerns.

Prerequisite(s): SOC 111 or SOC 120

208 Sociology of American Cities 3 Cr. Hrs.

Evolution and growth of cities, emphasizing affluence and poverty, racial and ethnic pluralism, physical and moral decay of inner cities, and their effects on urban residents.

Prerequisite(s): SOC 111 or SOC 120

209 Futuristics: Life Experiences in the Future 3 Cr. Hrs.

Future trends regarding scientific, technological, and social developments that will change lifestyles; emphasis on exploring a variety of "possible futures" and ways in which individuals produce or influence future direction.

Prerequisite(s): SOC 111 or SOC 120

210 Rural Communities 3 Cr. Hrs.

Examines the significance of rural communities in American history, and seeks to develop an appreciation for its diversity and complexity. Analyzes the drastic economic transition occurring in rural America today and the social impact of these changes on the individuals, families, and communities.

214 Applied Population Demography 3 Cr. Hrs.

Introduction to the study of human populations and the process that governs their change, fertility, migration and mortality. Application of demographic data to social and economic issues through computer applications for demographic research.

Prerequisite(s): SOC 111 or SOC 120

215 Cultural Diversity 4 Cr. Hrs.

Exploration of American diversity in terms of the dynamics of intergroup relations from past to present. Groups included in the exploration: racial, ethnic, social class, gender, religious, age, disability, and sexual preference.

Prerequisite(s): SOC 111 or SOC 120

216 Human Sexuality 3 Cr. Hrs.

The interrelatedness of the biological, psychological, religious and sociological factors in influencing attitudes toward sexuality.

217 Human Sexuality II 3 Cr. Hrs.

This course focuses on male and female anatomy, physiology, conception, contraception, sexually transmitted diseases and sexual violence.

Prerequisite(s): SOC 216

225 Juvenile Delinquency 3 Cr. Hrs.

Extent, theories, treatment and prevention of juvenile delinquency.

Prerequisite(s): SOC 111 or SOC 120

226 Criminology 3 Cr. Hrs.

Nature and extent of conventional, organized, and white collar crime in modern society, contributing causes, and methods used in control.

Prerequisite(s): SOC 111 or SOC 120

227 Probation & Parole 3 Cr. Hrs.

Techniques of case management of probationers and parolers, focusing on legal precedents, pre-sentence investigation, researches abnormal criminal personality types and approaches in working with such persons.

Prerequisite(s): SOC 226

235 African-American Family 3 Cr. Hrs.

This course presents a critical and analytical examination of the African-American experience in white America from the early 1600s up through today. The course's central theme is viewing the African-American family as a varied and complex social system within the African-American community, which is in turn highly interdependent with the wider multicultural American community.

240 Controversial Social Issues 3 Cr. Hrs.

This course will address itself to a critical analysis of opposing viewpoints which surround some of today's most hotly debated, controversial, and explosive social issues as abortion, prayer in school, nuclear deterrence, etc.

Prerequisite(s): SOC 111 or SOC 120

270 Sociology Internship R 1 - 12 Cr. Hrs.

Involvement in a field related experience outside the classroom setting, in which the learning outcomes and the form of evaluation will be determined by the supervising sociology instructor.

295 Independent Study Sociology**R 1 - 3 Cr. Hrs.**

Examines social conditions, problems, and issues which are of interest to the student under the directions of a faculty member. May be repeated for a total of six (6) credit hours.

297 Special Topics in Sociology**R 1 - 6 Cr. Hrs.**

Studies selected topics related to current American social issues, trends, or problems. These topics may be offered through regular class schedules, television, newspaper, or mini-workshops.

Spanish (SPA)**100 Conversational Spanish I 3 Cr. Hrs.**

Understanding and speaking in conversational settings, using knowledge of Spanish-speaking cultures. May not be taken for credit if the student has completed SPA 101 or any other first or second-year Spanish course.

101 Elementary Spanish I 4 Cr. Hrs.

Foundation for understanding, speaking, reading, and writing Spanish. Language laboratory work may be required.

102 Elementary Spanish II 4 Cr. Hrs.

Foundation for understanding, speaking, reading, and writing Spanish. Language laboratory work may be required.

*Prerequisite(s): SPA 101***103 Elementary Spanish III 4 Cr. Hrs.**

Foundation for understanding, speaking, reading, and writing Spanish. Language laboratory work may be required.

*Prerequisite(s): SPA 102***161 Conversational Spanish for Criminal Justice 3 Cr. Hrs.**

Conversational Spanish focused on learning to speak with Spanish-speaking individuals in the professional capacity of a law enforcement officer. Oral practice and discussions center on the understanding of the language within its cultural context. Considerable supplementary work required.

*Prerequisite(s): SPA 100 strongly recommended***201 Intermediate Spanish I 4 Cr. Hrs.**

Reviews and extends basic principles through composition and conversation, stressing fluency. Language laboratory work may be required.

*Prerequisite(s): SPA 103***202 Intermediate Spanish II 4 Cr. Hrs.**

Reviews and extends basic principles through composition and conversation, stressing fluency. Language laboratory work may be required.

*Prerequisite(s): SPA 103***203 Intermediate Spanish III 4 Cr. Hrs.**

Reviews and extends basic principles through composition and conversation, stressing fluency. Language laboratory work may be required.

*Prerequisite(s): SPA 202***297 Special Topics in Spanish****R 1 - 12 Cr. Hrs.**

Provides opportunities to receive credit for non-traditional courses such as courses by television and newspaper as well as special interest topics in the discipline.

Safety Engineering Technology (SRM)**101 Introduction to Safety Engineering Technology 3 Cr. Hrs.**

Overview of basic elements of an industrial risk management program; evolution of risk management; development of legal/moral precepts that lead to major occupational safety, health and environmental reform.

110 OSHA Compliance 3 Cr. Hrs.

Selected OSHA standards, relating to confined space, hazard communication and occupational health and environmental control. Two lecture, two lab hours per week.

120 Safety Lab 2 Cr. Hrs.

Active participation to recognize, understand and handle common safety hazards including scaffolding, personal protection, rigging, crane operations, permit required confined space (PRCS) and machine guarding. One lecture, two lab hours per week.

*Prerequisite(s): SRM 101 and MAT 116, CHE 151 or equivalent***130 Trainer Course for Occupational Safety & Health for the Construction Industry 3 Cr. Hrs.**

Allows the student to become a certified trainer in the OSHA Outreach Program, conduct the 10- and 30-hour construction industry courses (SRM 232 and SRM 231) and issue OSHA certification cards to participants verifying course completion. Covers training techniques, workshops, demonstrations and detailed information on construction work place implementation of the OSH Act. Also includes an introduction to OSHA's Construction Standards, 29 CFR 1926, and an overview of the requirements of the more frequently referenced standards.

131 Trainer Course for Occupational Safety & Health for the General Industry 3 Cr. Hrs.

Provides an understanding of the General Industry requirements of the Occupational Safety and Health Act, 29 CFR 1910. With successful completion, the student becomes a certified trainer in the OSHA Outreach Program. Includes development of effective training technique, lectures, workshops, demonstrations; also presents detailed information on general industry work place OSH Act implementation and effective teaching.

132 OSHA Construction Trainer Update 2 Cr. Hrs.

Construction trainer update that provides relevant information on the Code of Federal Regulations, 29 CFR 1926. Introduces new amendments and promulgations of 29 CFR 1926 as well as hazard recognition, evaluation, control of evolving technologies, and most frequent site violations in the construction industry. Includes updated training techniques: lectures, workshops, and demonstrations.

*Prerequisite(s): SRM 130 or equivalent***133 OSHA General Industry Trainer Update 2 Cr. Hrs.**

Review and update of training skills and relevant changes of the Occupational Safety and Health Act for the General Industry. Includes updated and detailed information on the Code of Federal Regulations, 29 CFR 1910, for relevant standards applicable to the general industry trades and the most frequently cited violations.

*Prerequisite(s): SRM 131 or equivalent***138 Machine & Machine Guarding Standards 3 Cr. Hrs.**

Introduction to various types of common machinery and related safety standards. Includes hazard recognition associated with points of operations, rotating parts, flying chips and sparks as well as abatement alternatives. Two lecture, two lab hours per week.

139 Respiratory Protection 3 Cr. Hrs.

Requirements for establishing, maintaining, and monitoring a respirator program. Includes terminology, OSHA and ANSI standards, NIOSH certifications, and medical evaluation recommendations. Laboratories include respirator selection and an array of respiratory and support equipment for hands-on training. Two lecture, two lab hours per week.

144 Fall Arrest Systems 3 Cr. Hrs.

Overview of state-of-the-art technology for fall protection and current OSHA requirements. Includes the principles of fall protection, the components of fall arrest systems, the limitations of fall arrest equipment, and OSHA policies regarding fall protection; features a one-day field exercise demonstrating fall protection equipment. Two lecture, two lab hours per week.

146 OSHA Recordkeeping 1 Cr. Hr.

Identification and fulfillment of employer responsibilities for posting certain records, maintaining records of illnesses and injuries, and reporting specific cases to OSHA. Includes several practice sessions.

151 OSHA 1910.120 Hazardous Waste Operations 5 Cr. Hrs.

Training required to enter or work on a hazardous waste site with emphasis on personnel safety, site hazards, toxicology, personal protective equipment, decontamination, site characterization, and site control. Four lecture, three lab hours per week.

152 OSHA 1910.120 Hazardous Waste Operations Refresher 1 Cr. Hr.

Provide classroom and practical application to assure the student has maintained pertinent knowledge, skills and information required to handle hazardous material/wastes emergencies. Required for entering and/or working on a hazardous waste site. Emphasis on personnel safety, site hazards, toxicology, personal protective equipment, decontamination, site characterization and site control.

153 Introduction to Transportation Safety 1 Cr. Hr.

Rules, interpretations, record keeping and standards required by U.S. DOT (49 CFR 172 Subpart H) for the transportation of Hazardous Materials.

154 Introduction to OSHA Construction Standards 1 Cr. Hr.

Introduction to rules, interpretations, recordkeeping and standards required by OSHA (29CFR Part 1926) for the construction industry to ensure employees a safe, healthful work place. The course complies with the guidelines and requirements for the OSHA 10-hour outreach training completion card.

155 Introduction to OSHA General Industry Standards 1 Cr. Hr.

Introduction to rules, interpretations, record keeping and standards required by OSHA (29CFR Part 1910) for the general industry to ensure a safe, healthful work place. The course complies with the guidelines and requirements for the OSHA 10-hour outreach training completion card. One lecture, one lab hour per week.

211 Applied Industrial Risk Management 3 Cr. Hrs.

A comprehensive approach to the factors that contribute to safe and environmentally sound practices in businesses and industries.

212 Hazard Control Analytical Methods 4 Cr. Hrs.

Application of engineering principles and methods to minimize health and safety risks through design and quality analysis of product, manufacturing processes, equipment, facilities, and operations. Three lecture, two lab hours per week.
Prerequisite(s): MAT 116 and MAT 122

215 Industrial Hygiene 3 Cr. Hrs.

Fundamental measurement of fumes, particulate matter, gases, polluted water, noise and radiation. Comparison of these variables with safety standards. Prediction of costs and engineering problems encountered with various manufacturing methods with reference to the environment.
Prerequisite(s): CHE 131

217 Industrial Toxicology 3 Cr. Hrs.

Routes of entry of poisons into the human body; target organs, methods used to assess health risks; manifestations of toxicity; dose-response evaluations; Subpart Z "Toxic and Hazardous Materials" of OSHA 1910. Two lecture, two lab hours per week.
Prerequisite(s): BIO 107

219 Industrial Hygiene Instrumentation 3 Cr. Hrs.

Use of industrial hygiene instruments employed in the measurement of parameters of parameters which may present a health hazard to humans. Two lecture, two lab hours per week.
Prerequisite(s): SRM 215

221 Safety & Health Program Management 3 Cr. Hrs.

The fundamental components of safety policies, procedures, practices and administrative controls to minimize accidents in business and industry.

222 Product Safety Management 3 Cr. Hrs.

Introduction to the identification and avoidance of potential hazards from consumer, industrial, and commercial products.
Prerequisite(s): SRM 212

230 Occupational Safety & Health 3 Cr. Hrs.

Study of requirements of Occupational Safety and Health Act emphasizing standards governing general industry production-type operations. Two lecture and two lab hours per week.

231 OSHA Construction Standards 3 Cr. Hrs.

Rules, interpretations, record keeping and standards required by OSHA (29CFR Part 1926) for the construction industry to ensure employees a safe, healthful work place. Successful completion of this course provides the "30 Hour OSHA Construction Safety Card." Two lecture hour and two lab hours per week.

232 Construction Work Site Safety 3 Cr. Hrs.

A comprehensive approach to develop and supervise safe conditions, practices, and compliance at construction work sites. Two lecture and two lab hours per week.
Prerequisite(s): SRM 231

270 Safety Engineering Technology Internship R 3 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter. Six practicum hours per week.

278 SRM Capstone 3 Cr. Hrs.

Assessment of achievement by Safety and Risk Management degree students in attaining program outcomes by employing reflective learning through demonstration of occupational safety, health, and environmental related principles and practices. Two lecture, two lab hours per week.

295 Seminars for Safety Risk Manager R 1 - 4 Cr. Hrs.

Current issues relating to responsibilities of safety risk manager for applying new Occupational Safety and Health Administration standards, Workers Compensation, statutes such as hazardous waste, product liability and court decision.

297 Special Topics in Safety Engineering Technology R 0.5 - 6 Cr. Hrs.

Varied content offerings of special interest to the discipline but not covered within existing courses; brief descriptions of topics will be given when the course is offered.

Surgical Technology (SUT)

100 Introduction to Tissue Banking

5 Cr. Hrs.

Framework and environment for the practice of Tissue Banking. Introduces the use of communication, group process, and critical thinking in the tissue banking environment. Focuses on safety through surgical sterile technique, overview and history of tissue banking, quality systems, and the ethical and regulatory requirements set by the American Association of Tissue Banking (AATB), FDA, and related regulatory agencies. Four lecture, three lab hours per week.

Prerequisite(s): Restricted to majors

101 Tissue Banking I

5 Cr. Hrs.

Techniques for preparing the environment for tissue recovery to take place including surgical instrumentation, supplies, equipment, and quality controls. Discusses quality control measures used throughout tissue recovery and processing procedures. Applies these techniques to basic tissue recovery. Four lecture, three lab hours per week.

Prerequisite(s): Restricted to majors

111 Surgical Technology Fundamentals

6 Cr. Hrs.

Discusses the framework and environment for the practice of Surgical Technology. Introduces the use of therapeutic communication, group process, and critical thinking in perioperative care. Focuses on safety through preoperative preparation, asepsis, and an overview of anesthesia. Four lecture, four clinical hours per week.

Prerequisite(s): BIO 161 and COM 206 and ALH 103 and HIM 121 and ENG 111

112 Surgical Process

10 Cr. Hrs.

Establishes the techniques for preparing the operating room, instruments, supplies, and the equipment to be used during a surgical procedure. Applies these techniques to basic abdominal surgeries. Five lecture, sixteen directed practice hours per week.

Prerequisite(s): BIO 162 and PSY 119 and SUT 111

201 Tissue Banking II

8 Cr. Hrs.

Role transition to beginning Tissue Banking Technology practitioner. Emphasizes a common systematic approach to all tissue recovery and processing procedures. Introduces Tissue Banking Technology's role on recovery and processing teams in all related environments. Sixteen clinical hours per week.

Prerequisite(s): Restricted to majors

202 Tissue Bank Certification Review

4 Cr. Hrs.

Preparation for the future graduate of the Tissue Banking Technology certificate program to take the Certified Tissue Bank Specialist (CTBS) exam given by the American Association of Tissue Banks (AATB). Detailed information of the AATB requirements of tissue banks that store, distribute, recover, and process human tissue. Includes preparation for the CTBS exam through review of all previous course work.

Prerequisite(s): Restricted to majors

211 Surgical Procedures I

10 Cr. Hrs.

Discusses specific surgical procedures of the gastrointestinal, urinary, and reproductive systems. Adapts surgical care concepts to geriatric and pediatric patients. Correlates intraoperative procedures with postoperative care. Five lecture, sixteen directed practice hours per week.

Prerequisite(s): BIO 205 and SUT 112 and ALH 104

212 Surgical Procedures II

10 Cr. Hrs.

Discusses ophthalmic, ear/nose/throat, head and neck, oral, plastic, and vascular surgical procedures. Explains the role of the scrub technologist when intraoperative emergencies occur. Five lecture, sixteen directed practice hours per week.

Prerequisite(s): ALH 201 and MAT 106 and SUT 211

213 Surgical Procedures III

11 Cr. Hr.

Discusses specific orthopedic, neurological, and thoracic surgical procedures. Examines immediate post-anesthesia care. Five lecture, nineteen directed practice hours per week.

Prerequisite(s): ALH 220 and ENG 112 and SUT 212

220 Surgical Technology Role Transition

10 Cr. Hrs.

Focuses on role transition to beginning surgical technology practitioner. Emphasizes a common systematic approach to all surgeries. Introduces surgical technologist's role on specialty teams, as second circulator, in ambulatory surgery centers, and in pediatrics. Five lecture, twenty-five directed practice hours per week.

Prerequisite(s): SUT 213 and ALH elective

297 Special Topics in Surgical Technology

R 0.5 - 6 Cr. Hrs.

Provides the opportunity to receive credit for career related courses, workshops, or customized learning experiences. Topics include current practices and special interest topics in perioperative health care.

Social Work (SWK)

206 Social Work as a Profession

4 Cr. Hrs.

Introduction to social work; history of social welfare and social work. Also addresses the emergence, development, and changing nature of social needs relating to social policy, social services and programs in response to prevailing social conditions and social problems. Exploration of feelings, beliefs and values regarding social problems; the role of professional social workers and the preparation required for professional generalist social work practice.

Prerequisite(s): SOC 111 is recommended, not required.

211 Basic Practice Theory I

3 Cr. Hrs.

First course in a series of three dealing with practice theories and methods and their application to direct social work practice. Beginning theoretical concepts, values and principles that form the framework for a generalist social work practitioner. Focuses on theory and practical application for intervention with individuals, families, small groups, organizations, and communities. Also includes analysis of at-risk populations based on socio-economic class, disablement, race, ethnicity, gender and sexual orientation.

Prerequisite(s): SOC 111 or SOC 120 recommended

212 Basic Practice Theory II

4 Cr. Hrs.

Social work practice theories, methods, and applications; theoretical concepts, values and principles that form the framework for a generalist social work practitioner with emphasis on intervention with individuals, families, small groups, organizations, and communities. Also includes analysis of special at-risk populations. Students complete a practicum at a local agency with an absolute minimum of 32 hours.

Prerequisite(s): SWK 211

213 Social Welfare & Social Services

4 Cr. Hrs.

Generalist social work roles and practice settings; impact of social policy on the service delivery system. Exploration of social work values and ethics as related to practice and social welfare policy. Includes examination of the congruence between personal values and social work values, especially regarding diversity. Students are required to complete a practicum at a local agency with an absolute minimum of 32 hours.

Prerequisite(s): SWK 206, SOC 111 and 112 or SOC 120 are recommended

Theatre (THE)

103 Acting for the Non-major 3 Cr. Hrs.

Introduction to the art of acting. Focus on acquainting non-acting majors with the concepts and skills taught to acting students. One lecture, four lab hours per week.

105 Theatre Appreciation 3 Cr. Hrs.

Theatre as an art form presented from the historical, literary and production points of view. (Greeks to the present)

106 Stagecraft 3 Cr. Hrs.

A study of techniques for building and handling theatrical scenery. Covers tools, materials, and hardware used, and the artistic and practical considerations of scenery construction.

Prerequisite(s): THE 107 must be taken concurrently

107 Lab for THE 106

Laboratory must be taken with THE 106.

108 Voice & Speech for the Actor 3 Cr. Hrs.

Basic training and practice in the actor's use of voice and speech. One lecture, four lab hours per week.

109 Movement for the Actor 3 Cr. Hrs.

Basic training and practice in movement for the stage. One lecture, four lab hours per week.

110 Drafting for the Theatre 3 Cr. Hrs.

Introduction to basic drafting tools and practices. Focus on drafting techniques used in theatre technology and design. One lecture, four lab hours per week.

Prerequisite(s): THE 106

111 Acting I 3 Cr. Hrs.

Basic training and practice in vocal, physical, and creative processes used by the actor. One lecture, four lab hours per week.

112 Acting II 3 Cr. Hrs.

Continuation of Acting I, with emphasis on scenework from 1850-1950. One lecture, four lab hours per week.

Prerequisite(s): THE 111

113 Acting III 3 Cr. Hrs.

Continuation of the study of acting techniques examined in Acting II, with additional emphasis on acting styles. One lecture, four lab hours per week.

Prerequisite(s): THE 112

115 Stage Lighting Fundamentals 3 Cr. Hrs.

A study of theatrical lighting equipment, materials, methods and techniques. Emphasis on technical aspects of stage lighting, with an introduction to the principles of lighting design.

Prerequisite(s): THE 117 must be taken concurrently

117 Lab for THE 115 1 Cr. Hr.

Laboratory must be taken with THE 115.

122 Theatre Sound Fundamentals 3 Cr. Hrs.

Introduction to the technical processes of theatre sound production.

Prerequisite(s): THE 123 must be taken concurrently

123 Lab for THE 122

Laboratory must be taken with THE 122.

125 Costume Fundamentals 3 Cr. Hrs.

Survey of the costume production process, with emphasis on research methodologies, costume construction and sewing techniques.

Prerequisite(s): THE 128 must be taken concurrently

126 Stage Make-Up 3 Cr. Hrs.

A basic approach in facial adaptation from youth to old age, achieving a likeness of fictional and non-realistic characters, use of beards and hair, three-dimensional builds and prosthetics. Primarily for the stage; however, there will be a brief excursion into techniques for film and television. One lecture, four lab hours per week.

127 Introduction to Stage Combat 3 Cr. Hrs.

An introduction to theatrical violence and fighting styles with emphasis on integration of technical skills and characterization. One lecture, four lab hours per week.

Prerequisite(s): THE 109

129 Lab for THE 125

Laboratory must be taken with THE 125.

165 Children's Theatre R 3 Cr. Hrs.

A course designed to cover dramatic composition and practical production procedures for child audiences. One lecture, four lab hours per week.

Prerequisite(s): Permission by the chairperson

198 Applied Theatre Technology R 1 Cr. Hr.

Lab experience in theatre technology; includes assistant stage management and production crew positions for departmental major productions. Assignments are made through department faculty and staff.

201 History of Theatre I 3 Cr. Hrs.

The world of theatre from its origins through 1000 A.D. A close look at the architecture, costuming, acting and plays of the Egyptian, Greek, Roman, and Medieval Periods.

202 History of Theatre II 3 Cr. Hrs.

Survey of the history and development of theatrical production during the Renaissance and Restoration periods.

203 History of Theatre III 3 Cr. Hrs.

Survey of the history and development of theatrical production from the 18th century to the present day.

206 Script Analysis R 3 Cr. Hrs.

Focus on discovering creative, in-depth techniques of script analysis and realizing different methods for researching the script. Techniques can be applied to understanding the script as an actor, director, designer, dramaturg, or playwright. One lecture, four lab hours per week.

Prerequisite(s): THE 105

211 Advanced Acting I 3 Cr. Hrs.

An intensive study of the art of acting, focusing on the integration of truth, technique and style. One lecture, four lab hours per week.

Prerequisite(s): THE 113

213 Auditions 3 Cr. Hrs.

An overview of skills needed for successful auditioning and entry into the profession. One lecture, four lab hours per week.

Prerequisite(s): THE 111

215 Acting Shakespeare 3 Cr. Hrs.

Script and character analysis and the performance of selected Shakespearean scenes, monologues, and soliloquies. One lecture, four lab hours per week.

218 Musical Theatre Performance R 3 Cr. Hrs.

To learn the historical background of this American theatrical form and its continuing development up to the present day, identifying specific productions which set new standards. One lecture, four lab hours per week.

220 Theatre Portfolio 3 Cr. Hrs.

Process for creating a theatre resume and portfolio; development of presentation and interview skills.

Prerequisite(s): 15 hours from THE department and approval of division counselor

240 Stage Management 3 Cr. Hrs.

An introduction to the creative and administrative work of a stage manager. Including hands-on activities in learning the principles and practices of stage management. One lecture, four lab hours per week.

Prerequisite(s): THE 105

245 Directing 3 Cr. Hrs.

Introduction to the art and techniques of directing for the stage, including visual story telling, script analysis and working with actors. One lecture, four lab hours per week.

Prerequisite(s): THE 111

255 Theatre Workshop R 3 Cr. Hrs.

Focused on a specialized area in the theatre. This laboratory course is designed to bring together performance, direction, and production. One lecture, four lab hours per week.

298 Theatre Practicum: Technical
R 1 - 3 Cr. Hrs.

Practical experience in advanced stage management, engineering, technical production, and design positions for departmental major productions. Assignments are made through department faculty and staff.

Prerequisite(s): Permission of instructor

299 Theatre Practicum: Performance
R 1 - 6 Cr. Hrs.

Theatre Practicum – Performance provides the student who is interested in the performance aspects of production the opportunity to receive credit for practical experience. If the experience takes place off campus, then arrangements must be made through the department chairperson.

Travel & Tourism (TNT)

100 Introduction to Travel & Tourism
3 Cr. Hrs.

Overview of terminology, concepts, and specialized fields that comprise the travel and tourism industry including job opportunities.

Prerequisite(s): DEV 065, DEV 085, DEV 110 or equivalent

102 Travel Sales & Telephone Techniques
1 Cr. Hr.

Methods and standards for effective travel industry sales practices.

Prerequisite(s): TNT 100

104 Tariff & Ticketing: North America
3 Cr. Hrs.

Airline tariff interpretation, fare calculation/rating, transportation taxes, rules, and procedures for ticketing.

Prerequisite(s): TNT 100, TNT 112, MAT 105

106 Employment Guidelines for Travel Industry
1 Cr. Hr.

Job search techniques applied to travel and tourism industry including resume preparation, application, and interviewing for a job.

Prerequisite(s): TNT 100

108 Accommodations, Cars, Tours & Rail
2 Cr. Hrs.

Study of research and reservation process for accommodations, car rentals, tours, and rail transportation.

Prerequisite(s): TNT 100

109 Cruise Line Sales
2 Cr. Hrs.

Study of research, reservation and sales process for the cruise industry worldwide.

Prerequisite(s): TNT 100

112 Domestic Air Travel
3 Cr. Hrs.

Survey of the domestic airline industry, domestic airline and city codes, airline terminology, aircraft types, major reference guides, reservations ethics, and map locations of major North American airports.

Prerequisite(s): DEV 065, DEV 085, DEV 110 equivalent

114 International Travel
3 Cr. Hrs.

Survey of the international airline industry, including international airline codes, fares, ticketing, and foreign documentation requirements. Map location of major cities and airport codes in Europe, South America, Middle East, Africa, and South Pacific.

Prerequisite(s): TNT 112 and TNT 100

122 Airline Computer I
3 Cr. Hrs.

Airline reservation system focusing on displaying availability, space confirmation, and passenger record building and modifying. Two lecture, two lab hours per week.

Prerequisite(s): TNT 100, TNT 112 and one of: BIS 160, 119, or M41, M51, M61, M70 or equivalent

123 Airline Computer II
2 Cr. Hrs.

Airline computer reservation system, including fare quotes and itinerary pricing; creating, modifying, and searching for applicable fares. One lecture, two lab hours per week.

Prerequisite(s): TNT 104, TNT 122

130 Destinations I
3 Cr. Hrs.

Tourist destinations in North America, Central and South America, the Caribbean and Bermuda, and the methods of selling these destinations.

131 Destinations II
3 Cr. Hrs.

Study of tourist destinations in Europe, Africa, the Middle East, Asia and the Pacific, and the methods of selling these destinations.

201 Tourism for the Travel Industry
3 Cr. Hrs.

Problems, issues, and trends in the travel industry.

Prerequisite(s): TNT 114, TNT 122

202 Marketing for the Travel Industry
3 Cr. Hrs.

Overview of an annual plan for a travel agency which includes units on advertising, marketing, sales, personnel, facilities, and other operational incomes and expenditures.

Prerequisite(s): TNT 102, TNT 108, TNT 114, TNT 122

210 Management of Travel Sales Personnel
3 Cr. Hrs.

Supervisory techniques for travel agency staff emphasizing communication, selection, and professional development.

Prerequisite(s): TNT 102, TNT 108, TNT 114, TNT 122

215 Managing a Travel Agency
3 Cr. Hrs.

Managerial and financial aspects of agency operations, including internal flow and impact of external factors on successful management.

Prerequisite(s): TNT 102, TNT 108, TNT 114, TNT 122

224 Advanced Airline Computer I
2 Cr. Hrs.

Airline reservation system including hotel accommodations, cars, and client profiles. One lecture, two lab hours per week.

Prerequisite(s): TNT 108, TNT 123

225 Advanced Airline Computer II
2 Cr. Hrs.

Application of airline computer reservation system beyond airline, car, airfares, hotel, and client profiles. Airline computer reference systems and other travel reservation capabilities. One lecture, two lab hours per week.

Prerequisite(s): TNT 114, TNT 123

250 Travel Sales Practicum
3 Cr. Hrs.

Study and application of advanced sales techniques which apply to the travel industry.

Prerequisite(s): TNT 100, TNT 102, TNT 104, TNT 108, TNT 109, TNT 112, TNT 114, TNT 122, TNT 123, TNT 130, TNT 131, TNT 131, MRK 201

270 Travel & Tourism Internship
R 3 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare reports and/or projects.

Prerequisite(s): TNT 100, TNT 102, TNT 104, TNT 106, TNT 108, TNT 112, TNT 114, TNT 122, EBE departmental approval

278 Travel & Tourism Capstone
3 Cr. Hrs.

Assessment of achievement by Travel & Tourism degree students in attaining program outcomes by employing reflective learning through demonstration of related principles and practices.

Prerequisite(s): Approval of coordinator

297 Special Topics in Travel & Tourism
R 1 - 3 Cr. Hrs.

Topics within the program not covered within existing courses; opportunities for non-traditional learning.

Transportation Management (TRA)

120 Transportation Logistics 3 Cr. Hrs.

Overview of all modes of transportation in a national and international interlocking network, emphasizing interdependent relationships between the users, providers, and government.

205 Transportation Pricing 3 Cr. Hrs.

Fundamental tariffs, rules and rate theory affecting the transportation industry. Discussion of the transportation pricing system, including its transportation publications known as classifications, procedures, practices, documents, regulation, computerization, and jargon.

Prerequisite(s): TRA 120

210 Transportation Claims Management 3 Cr. Hrs.

Basis of carrier liability, including current regulations covering freight charge billings and resolution of claims. Resolving undercharge/overcharge claims.

Prerequisite(s): TRA 120

215 Export-Import Distribution Management 3 Cr. Hrs.

Problems involved in the distribution of goods to points outside the United States, ocean, air and land transportation problems.

Prerequisite(s): TRA 120

220 Air Cargo Operations 3 Cr. Hrs.

Work center(s) management procedures involved in air cargo movement as related to terminal operations, cargo documentation, storage and handling, palletization, load planning, and aircraft loading.

Prerequisite(s): TRA 120 or AVA 105

230 Transportation Regulations 3 Cr. Hrs.

Evaluation of the effect of economic and social regulatory controls on the management and operations of transportation carriers.

Prerequisite(s): MAN 205, TRA 120

231 Computerization in Distribution 3 Cr. Hrs.

Orientation to the use of electronic data systems in the transportation industry with emphasis on operational activities of the distribution function.

270 Transportation Management Internship R 1 - 7 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

297 Special Topics in Transportation R 0.5 - 6 Cr. Hrs.

Special interest content within the discipline as well as instruction delivered in a non-traditional format such as TV or videotape.

Visual Communications (VIS)

100 Design Survey 3 Cr. Hrs.

Overview and orientation to the visual communications and printing industries including principles and practices of design.

Prerequisite(s): DEV 110 or equivalent

101 VIS Tech Prep Seminar R 3 Cr. Hrs.

A preparatory course designed as an overview of interactive media technology.

Prerequisite(s): Acceptance into the Tech Prep program

104 Computer Basics 3 Cr. Hrs.

Introduction to Macintosh computers and operating systems. Overview of graphic and multimedia design software. Analysis of digital design trends and processes.

105 Printing Basics 3 Cr. Hrs.

Development and evaluation of printing processes including letterpress, gravure, flexographic, offset, silk screen, and digital, and the kinds of work for which they are designed. Two lecture, four lab hours per week.

106 Design Basics: 2-D 3 Cr. Hrs.

Introduction to 2-D design fundamentals applied to visual communications, printing and the arts. Two lecture, four lab hours per week.

107 Design Basics: 3-D 3 Cr. Hrs.

Introduction to 3-D design fundamentals applied to visual communications, printing and the arts. Two lecture, four lab hours per week.

Prerequisite(s): VIS 106

108 Typography 3 Cr. Hrs.

Introduction to typography as an element and tool of visual communication. The concept of type as image is emphasized. Two lecture, four lab hours per week.

109 Design Drawing 3 Cr. Hrs.

Introduction to marker rendering and other design drawing techniques as applied to visual communications and printing. Two lecture, four lab hours per week.

Prerequisite(s): ART 111 or IND 131

114 Interactive Digital Theory 3 Cr. Hrs.

Various concepts of interactive design principles and methods, including the fundamentals of contemporary digital design and process from analysis and design through production and delivery.

115 Digital Video 3 Cr. Hrs.

Introduction to digital video editing software and the development of digital video for multimedia graphics.

Prerequisite(s): VIS 104 and VIS 114

116 Digital Animation 3 Cr. Hrs.

Introduction to 2-D and 3-D animation software and the development of animations for presentations and multimedia applications.

Prerequisite(s): VIS 104 and VIS 114

117 Web Page Design 3 Cr. Hrs.

Web page design using HTML-based software. Design basics and a hands-on approach emphasized. Participants will develop their own web page by the end of the course.

Prerequisite(s): VIS 104 or CIS 107 or OIS M70 or OIS M71 or CIS 129 and VIS 114 and VIS 147

118 Web Page Design II 3 Cr. Hrs.

Web page design using vector graphic based software. Design basics and hands-on approach emphasized. Development of online interactive media and/or animation.

Prerequisite(s): VIS 117

146 Digital Illustration 3 Cr. Hrs.

Computer illustration techniques using vector based software.

Prerequisite(s): VIS 104

147 Digital Imaging 3 Cr. Hrs.

Computer imaging and photo manipulation using raster based software.

Prerequisite(s): VIS 104

148 Digital Page Layout 3 Cr. Hrs.

Introduction to computer page layout and composition using desktop publishing software.

Prerequisite(s): VIS 108 and VIS 146 or VIS 147

150 Screen Printing 3 Cr. Hrs.

An introduction to producing a textile print, from preparing camera ready art to printing the finished product.

151 Offset Printing 3 Cr. Hrs.

A study of basic offset printing. Characteristics and operations of the duplicator size presses. A study of various types of dampening systems. Understand the required adjustments necessary for quality printing.

Prerequisite(s): VIS 105 or PRT 101

201 Digital PrePress I 3 Cr. Hrs.

Fundamentals of digital prepress and the techniques used to prepare page layouts and designs for printing.

Prerequisite(s): VIS 146 and VIS 147 and VIS 148

202 Digital PrePress II 3 Cr. Hrs.

Advanced digital prepress and color separation techniques used to prepare page layouts and designs for printing.

Prerequisite(s): VIS 201 or PRT 271

206 Design Principles I 4 Cr. Hrs.

First of a two-part series exploring advanced elements and principles of design; introduction to design symbology. Two lecture, four lab hours per week.

Prerequisite(s): VIS 146 and VIS 147 and VIS 148

Co-requisite: VIS 236

207 Design Principles II 4 Cr. Hrs.

Second of a two-part series exploring advanced elements and principles of design; introduction to identity systems. Two lecture, four lab hours per week.

Prerequisite(s): VIS 206

Co-requisite: VIS 237

236 Design Applications I 4 Cr. Hrs.

Application of symbology created in Design Principles I to the development and examination of a signage system. Two lecture, four lab hours per week.

Prerequisite(s): VIS 146 and VIS 147 and VIS 148

Co-requisite: VIS 206

237 Design Applications II 4 Cr. Hrs.

Exploring the use of design elements and principles and applying it to current trends within a marketing concept. Two lecture, four lab hours per week.

Prerequisite(s): VIS 236

Co-requisite: VIS 207

265 Digital Authoring 3 Cr. Hrs.

Fundamentals of 3-D graphics software and the development of print, presentation and multimedia graphics. One lecture, four lab hours per quarter.

Prerequisite(s): VIS 116

270 Visual Communications Internship R 1 - 12 Cr. Hrs.

Students earn credits toward degree requirements for work learning experience. Students already working may apply to use that experience to meet internship requirements. Students establish learning outcomes and prepare related reports and/or projects each quarter.

276 Visual Communications Portfolio Development 4 Cr. Hrs.

Each second year student will develop a portfolio from portfolio projects work experience, freelance, etc. Through lecture, demonstration, class handouts and guest speakers the student will have the exposure and guidelines necessary to build a unique and individualized portfolio. Two lecture, four lab hours per week.

Prerequisite(s): IND 232 or VIS 237

278 Visual Communications Capstone 3 Cr. Hrs.

Comprehensive application of all skills and techniques learned in prior visual communications classes and resources available in the Design department. Three lecture hours per week.

Prerequisite(s): VIS 207 and VIS 237

297 Special Topics in Visual Communications R 1 - 6 Cr. Hrs.

Provides opportunities to offer special interest content within the discipline as well as receive credit for instruction delivered in a non-traditional format such as TV. Students may apply only six credit hours of Special Topics courses toward an associate degree in Design.

Volunteer Services (VOL)**190 Volunteer Seminars R 0.5 - 3 Cr. Hrs.**

The volunteer seminars will encompass topics offered as part of a continuing education program for persons interested in Volunteer Management. Seminars will be planned, scheduled, and offered throughout the year in a variety of volunteer management subject areas and for varying lengths of time.

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B.A., Wright State University
- Sandra Meadows (2001)**
Assistant Director, Financial Aid &
Scholarships
B.S., M.S., Wright State University
- John Meister (1986)**
Manager, Media Services, Information
Technology
B.A., Wittenberg University
- Laura A. Mercer (1989)**
Director, Strategic Project Management
B.S., Wright State University
M.A., George Washington University
- Sue Merrell (1993)**
Director, Curriculum & Assessment
B.S., Miami University
M.S., University of Dayton
Ph.D., Capella University
- Thomas Messinger (2002)**
Director, Facilities Management
B.S., Pennsylvania State University
(Registered Engineer, Pennsylvania)
- Jeffrey A. Miller (2000)**
Director, Business Services
B.S., Missouri Baptist College
M.B.A., Western Connecticut State
University
- Marcus Milligan (2002)**
Manager, Administrative Systems,
Information Technology
B.S., University Ulster, Ireland
M.B.A., University of Phoenix
- Debra Moody (2001)**
Counselor, Disability Services
A.A., Sinclair Community College
B.A., Capital University
M.R.C., Wright State University
- Robin Moore-Cooper (1993)**
Coordinator, Disability Services
A.A., Sinclair Community College
B.A., M.R.C., Wright State University
Ph.D., The Ohio State University
- Sharyn A. Morgan (1996)**
Academic Counselor, Business
Technologies
A.A.S., Sinclair Community College
B.A., Antioch University
M.S., University of Dayton
- Ellen Mosher (2004)**
Job/Trainer Facilitator, Student Services
B.A., Wheaton College
- Rex Mt. Castle (1995)**
Web Developer, Web Systems,
Information Technology
A.A.S., Sinclair Community College
- Dodie Munn (2005)**
Academic Counselor, Fine & Performing
Arts
A.S., Sinclair Community College
B.S., Bowling Green State University
M.B.A., University of Dayton
- Joseph V. Must (1977)**
Manager, Grants Accounting & Payroll
A.S., Sinclair Community College
B.S., University of Dayton
- Nancy Nevius (2006)**
Generalist, Engelwood Learning Center
- Hoang Nguyen (2001)**
Web Systems Administrator, Web
Systems, Information Technology
A.S., Sinclair Community College
B.S., University of Dayton
- Dan O'Callaghan (2001)**
Chief Information Security Officer,
Information Technology
A.A.S., Community College of the Air
Force
A.A.S., B.S., M.B.A., Wayland Baptist
University
- Julie E. Orenstein (2004)**
Records Manager/Archivist
B.A., M.A., Wright State University
- Julie Overholser (1999)**
Applications Analyst, Student Services
Information Technology
A.A.S., Sinclair Community College
- Cheryl Palafox-Stewart (2001)**
Senior Web Developer, Web Systems,
Information Technology
A.A.S., Sinclair Community College
B.S., Wright State University
M.S., University of Dayton
- Theresa Parker (2001)**
Counselor, Enrollment Services
B.S., M.A., Bowling Green State
University
(L.S.W.)
- Penelope Parmer (2000)**
Project Analyst, Institutional Planning &
Research
B.S., Xavier University
M.G.S., Miami University
- Joan Patten (1986)**
Assistant Director, Institutional Planning
& Research
B.S., M.S., Wright State University
- Latonia Peak-Brown (2001)**
Site Coordinator, Huber Heights
Learning Center
B.S., Central State University
M.C., Arizona State University
- Michael W. Plourde (1984)**
Director, Accounting Services
B.S., Wright State University
(Certified Public Accountant)

- Omar Powell (1999)**
Counselor, Minority Student Retention,
Counseling Services
B.S., Central State University
M.S.Ed., University of Bridgeport
- Julie E. Preisser (1981)**
Librarian, Periodicals/Reference, Library
B.A., Stanford University
M.S.L.S., University of Michigan
- Meredith A. Rainey (1986)**
Academic Counselor, Business
Technologies
A.A.S., Westchester Community College
B.S., Central State University
M.S., Wright State University
- Gail Ramke (2006)**
Counselor, Student Success Planning
Services
B.A., Miami University
B.S., Wright State University
- Jeanna Reedy (1987)**
Manager, Help Desk & Information
Technology Labs, Information
Technology
A.A.S., Sinclair Community College
B.S., A.I.U. University
- Alice Renner (2002)**
Web Course Facilitator, Distance
Learning
B.A., M.Ed., Miami University
M.Ed., Wright State University
- Allison Rhea (1998)**
Registrar, Registration & Student
Records
B.S., Wright State University
M.A., Illinois School of Professional
Psychology
- Becky Rittner (1995)**
I.T. Lab Coordinator, Information
Technology
A.A.S., Sinclair Community College
- Tom Roberts (1998)**
Advisor, Sinclair Ohio Fellows
Leadership Program
B.A., University of Dayton
- Marilyn Rodney (1991)**
Coordinator, Service Learning
B.S.N., M.S., Wright State University
- Chad Rumbarger (2004)**
Network Engineer/SNA, Information
Technology
- Phyllis Salter (1984)**
Academic Counselor, Developmental
Studies
B.S., The Ohio State University
M.R.C., Wright State University
(L.P.C.)
- Valerie J. Schaefer (2001)**
Programmer Analyst, Administrative
Systems, Information Technology
B.A., Antioch College
- Patricia Schlaerth (1990)**
Counselor, Student Success Planning
Services
B.A., D'Youville College
M.S., Wright State University
- Mark Schmid (2000)**
Assistant Manager, Purchasing
A.A.S., Sinclair Community College
B.A., Capital University
- Patrick Seymour (1999)**
Network Application Specialist,
Information Technology
- Cynthia L. Shoenleben (2003)**
Applications Administrator,
Administrative Systems, Information
Technology
A.S., Edison State Community College
- Tabitha A. Shuey (2003)**
Supervisor, Call Center
B.S., The Ohio State University
- Deborah A. Shuler (1996)**
Project Manager, Engineering &
Industrial Technologies
B.S., Kent State University
M.S.E., University of Dayton
- James R. Shuler (2002)**
Student Support Counselor, Counseling
& Disability Services
B.S. The Ohio State University
M.R.C. Bowling Green State University
(C.R.C.)
- David Siefert (2000)**
Director, Strategic Programming
B.A., Capital University
M.A., Antioch University
- Charlotte Simpson (1990)**
Conference Services Manager,
Corporate & Community Services
- Donald Smith (1998)**
Manager, Programs & Support, Distance
Learning
A.S., Community College of the Air
Force
B.A., M.A., Chapman University
- Susanna Smith (2001)**
Multimedia Services Coordinator, Media
Services, Information Technology
B.S., Franklin University
- Susan Spacht (2003)**
Academic Counselor, Liberal Arts &
Sciences
A.A.S., Sinclair Community College
B.S., M.S., Wright State University
- Jaton R. Stanford (1999)**
Recruitment Manager, Admissions
B.S., M.Ed., University of Cincinnati
- Donald Stark (2002)**
Aviation Maintenance Coordinator,
Aviation Technology
A.A.S., Community College of the Air
Force
B.S., Park College
M.S., Embry-Riddle Aeronautical
University
- Cheryl Stewart (2000)**
Policy & Procedures Specialist, Learning
Technology Production
B.S., M.Ed., Wright State University
- Penny Stewart (1998)**
Multimedia Graphics Producer, Learning
Technology Productions
B.A., Pike's Peak Community College
- Karen Stiles (1997)**
Manager, Corporate Outreach, The
Learning Center at Miami Valley
Research Park
A.A.S., Sinclair Community College
B.A., University of Dayton
M.A., Wright State University
- Linda Stowe (1972)**
Coordinator, Distance Learning Services,
Distance Learning Programs &
Support
A.S., Sinclair Community College
B.A., Antioch University
M.Ed., Ohio University
- Mary Strong (1987)**
Coordinator, Veterans Affairs,
Counseling Services
B.S., Park University
- Terry Stump (1995)**
Theatre Manager, Technical Director,
Fine & Performing Arts
B.F.A., Wright State University
- Sheila D. Suel (1993)**
Business Internship Coordinator,
Business Technologies
B.A., Indiana University of Pennsylvania
M.S., Wright State University
(Certified Professional Human
Resources)
- Stephen Swabb (2005)**
Senior Programmer Analyst,
Administrative Systems
B.S., M.S., University of Kentucky
- Nancy Thibeault (1999)**
Director, Distance Learning &
Instructional Support
B.A., Bridgewater State College
M.S., Wright State University
Ph.D., Nova Southeastern University
- Joseph F. Tobias (1985)**
Manager, Tartan Campus Store/
Materials Management
B.S., Taylor University
M.B.A., University of Phoenix
(Certified College Retailer)
- Melissa A. Tolle (2004)**
Admissions Officer, Admissions
A.A., Sinclair Community College
B.A., Miami University
M.S., University of Dayton
- Chris Tomlinson (1997)**
Programmer & Analyst, Business
Systems & Programming, Information
Technology
B.A., Wright State University
- John Tomoser (1988)**
Coordinator, Off-Campus Sites, Distance
Learning Program Support
A.A., A.S., Sinclair Community College
B.S., Wright State University

Winnie Tseng (1990)

Librarian, Reference, Library
B.S., Utah State University
M.L.S., University of Kentucky

Deidre Turner (2005)

Financial Aid Officer, Financial Aid &
Scholarships
B.A., The Ohio State University

Karen L. Usrey (1999)

Coordinator, Alumni Affairs
A.A., Sinclair Community College
B.A., M.A., Antioch University

Barbara Walker (2006)

Manager, Purchasing
A.A.B., The Wheeler School

Cindy Warner (2006)

Counselor, Counseling Services
B.S., Ohio University
M.S.Ed., University of Dayton
(L.P.C.)

David P. Wells (2002)

Database Administrator, Database
Administration & Business
Intelligence, Information Technology
B.S., M.S., Wright State University

Kathy Wiesenauer (1990)

Director & Systems Manager, Student
Success Services
B.A., Miami University
M.A., Bowling Green State University
Ph.D., University of Dayton

Ellis Willis (2004)

Coordinator, Criminal Justice Training
Academy
A.A., Sinclair Community College

Ellis Willis (2004)

Coordinator, Criminal Justice Training
Academy
A.A., Sinclair Community College

Karen Witt (1979)

Director, Student Success Planning
Services
B.S., Iowa State University
M.S., Wright State University

Julie Wittman (1995)

Help Desk Coordinator, Information
Technology
(H.D.A. Certified)

Sue Wood (1992)

Systems Applications Analyst,
Administrative Systems, Information
Technology
A.A.S., Sinclair Community College
B.S., Park University

Jody Yarnell (1994)

Assistant Manager, Tartan Campus
Store/Materials Management
A.S., Sinclair Community College

William Young (1997)

Coordinator, Academic Computer Center
A.A.S., Sinclair Community College

Full-Time Faculty

Barbara Adams (1982)

Professor, Developmental Studies
B.S., Bowling Green State University
M.Ed., Wright State University

Phyllis Adams (2003)

Assistant Professor, American Sign
Language
B.A., Antioch University McGregor
M.Ed., Ohio University

Marlon Aldridge (1998)

Associate Professor, Physics
B.S., Morehouse College
M.S., Wright State University

Mohammed B. Ali (2004)

Assistant Professor, Computer
Information Systems
A.A.S., Sinclair Community College
B.S., Wright State University
M.S., University of Dayton

Derek Allen (1996)

Associate Professor, Hospitality
Management
A.A.S., Sinclair Community College
B.S., Central State University
M.B.A., Wright State University

Shepherd Anderson (1996)

Chairperson, Professor, Industrial
Engineering Technology, Quality
Engineering Technology
B.S., M.S., Purdue University
(C. Mfg. E.)

Linda L. Andrews (1988)

Professor, Nursing
B.S.N., Columbia Union College
M.S., Wright State University
(R.N.)

Richard Andrews (2003)

Chairperson, Assistant Professor,
Accounting
A.A., Sinclair Community College
B.S., Wright State University
M.B.A., University of Dayton
C.P.A., (Certified Public Accountant)

Natalie Andrews (2004)

Assistant Professor, Business Information
Systems
A.A.S., Sinclair Community College
B.S., University of Cincinnati
M.Ed., Wright State University

Sandra J. Apgar (2000)

Assistant Professor, Sociology
A.A., Sinclair Community College
B.A., Wright State University
M.S.W., University of Cincinnati
(L.I.S.W.)

Stephen L. Ash (1976)

Chairperson, Professor, Automotive
Technology
B.S.Ed., M.Ed., Miami University

S. Kay Ashworth (1989)

Chairperson, Professor, Occupational
Therapy Assistant
B.S., Loma Linda University
M.A.T., Wright State University
(O.T.R./L.)

DeLena M. Aungst (2001)

Associate Professor, Business
Information Systems
B.A., Wright State University
M.S., University of Dayton

Deborah Badonsky (1978)

Professor, Paralegal
B.A., Valparaiso University
J.D., University of Toledo

Kenneth A. Baker (2000)

Associate Professor, Business
Information Systems
B.S., Bowling Green State University
M.B.A., University of Dayton
Ph.D., Capella University

Jennifer Barr (1993)

Chairperson, Professor, Medical
Assistant Technology
Coordinator, Allied Health Instruction
B.S., Eastern Kentucky University
M.T., Lourdes Hospital
M.Ed., Wright State University
(C.M.A.)

Connie S. Beal (1991)

Professor, Nursing
B.S.N., M.S., Wright State University
(R.N.)

Daniel E. Becker (1976)

Professor, Dental Hygiene
B.S., Ohio University
D.D.S., The Ohio State University

Cynthia A. Beckett (1982)

Chairperson, Professor, Respiratory Care
B.S., The Ohio State University
M.S., Wright State University
Ph.D., University of Dayton
(R.R.T., R.P.F.T.)

Dorothy Bely (2004)

Assistant Professor, Developmental
Studies
B.S., Ball State University
M.S., University of Dayton

E. Rocky Belcher (2001)

Associate Professor, Business
Information Systems
B.S., Wright State University
M.S., Columbus University

Moez Ben-Azzouz (2004)

Assistant Professor, Mathematics
B.S., M.S., Wright State University

Jack Bennett (1990)

Chairperson, Professor, English
B.A., Western Michigan University
M.A., Kent State University

Kay Berg (1990)

Professor, English
B.A., Elmhurst College,
M.A., California State College at San
Bernardino

David Bodary (1994)

Professor, Communication Arts
B.S., Eastern Michigan University
M.A., Ph.D., Wayne State University

William Boyko (1983)

Professor, Biology
B.S., Fairleigh Dickinson
M.S., Indiana University

- Douglas Bradley-Hutchison (1987)**
Professor, Physics
B.S., Montclair State College
M.S., University of New Hampshire
- Deborah Brady (2005)**
Assistant Professor, Accounting
B.B.A., University of Cincinnati
M.B.A., Xavier University
C.P.A., (Certified Public Accountant)
- Barbara Branstiter (1998)**
Professor, Physical Therapist Assistant
B.S., The Ohio State University
M.Ed., Urbana University
- V. Michael Brigner (2001)**
Associate Professor, Paralegal
B.A., Wright State University
J.D., Salmon P. Chase School of Law
- Dennis Brode (2004)**
Assistant Professor, Management
BSEET, DeVry Institute
M.B.A., Wright State University
- James Brooks (1983)**
Professor, Developmental Studies
B.A., M.A., University of Pacific
- John Brotbeck (2001)**
Associate Professor, Computer
Information Systems
B.S., Rider College
M.B.A., University of Findlay
- Bernice Brown (1997)**
Associate Professor, Developmental
Studies
M.A., University of Dayton
- Darrin Brown (2002)**
Instructor, Sociology
B.S., Central State University
- Randall Brown (2000)**
Associate Professor, Computer
Information Systems
B.A., Wright State University
M.S. Ed., University of Dayton
- Kimberly Brubaker (2005)**
Assistant Professor, Dietetics &
Nutritional Management
B.S., Eastern Illinois University
M.S., Miami University
- Brian Cafarella (2003)**
Assistant Professor, Developmental
Studies
B.S., Pace University
M.Ed., Cambridge College
- Susan Callender (1992)**
Professor, English
B.S., M.A., The Ohio State University
- Judith Campbell (1981)**
Professor, Radiologic Technology
A.A.S., Sinclair Community College
B.A., Capital University
(A.R.R.T.)
- Michael J. Canestaro (1998)**
Chairperson, Associate Professor,
Chemistry
A.A.S., Broome Community College
B.S., M.S., State University of New York
at Buffalo
- Susan Cannon (1998)**
Associate Professor, Radiologic
Technology
A.S., Sinclair Community College
B.S., M.S., University of Dayton
(A.R.R.T.)
- Tom Carlisle (1980)**
Professor, Industrial Engineering
Technology
B.E.T., University of Dayton
M.B.A., Wright State University
- Adrienne Cassel (2005)**
Assistant Professor, English
B.A., Central State University
M.A., Wright State University
M.F.A., Bennington College
- Donna M. Chadwick (1990)**
Professor, Accounting
B.F.A., M.B.A., Wright State University
(Certified Public Accountant, Certified
Management Accountant)
- Gene Chambers (1980)**
Chairperson, Professor, Computer-Aided
Manufacturing
A.A.S., Sinclair Community College
B.S., University of Cincinnati
(C. Mfg. E.)
- Pamela Chambers (1995)**
Professor, Criminal Justice
B.S., M.S.Ed., University of Dayton
- Robert Chambers (2002)**
Associate Professor, Fire Science
Technology
A.A.S., Sinclair Community College
B.S., University of Cincinnati
M.S., Wright State University
- Robert Chaney (1992)**
Professor, Mathematics
B.S., M.A., Miami University
- Harvey Chew (1984)**
Professor, Mathematics
B.A., M.A., M.S.T., Ed.D, University of
Missouri
Ed.S., Central Missouri State University
- Elizabeth Christensen (2001)**
Assistant Professor, English
B.S., M.A., Wright State University
- Patricia Clark (1990)**
Associate Professor, Developmental
Studies
B.S., Bowling Green State University
M.Ed., Wright State University
- Franklin E. Clay (1977)**
Professor, Fire Science Technology, Safety
Engineering Technology
B.S., University of Maryland
M.A., Wright State University
- Kathleen C. Cleary (2003)**
Chairperson, Associate Professor,
Theatre & Dance
B.A., Franciscan University
M.A., Binghamton University
Ph.D., The Ohio State University
- Robert Coates (2004)**
Assistant Professor, Art
B.F.A., Wright State University
M.F.A., University of Pennsylvania
- Carol Cole (2004)**
Assistant Professor, Physical Education
B.S., ED., Bowling Green State University
M.S., Miami University
(ACSM)
- Barbara Coleman (1997)**
Associate Professor, Nursing
B.S.N., Wright State University
M.S.N., Texas Woman's University
- Deanna D. Collins (1991)**
Professor, Nursing
B.S.N., Capital University
M.S., Wright State University
(R.N.)
- Louis Conn (1981)**
Professor, Respiratory Care
A.A.S., Sinclair Community College
B.S., Capital University
(R.R.T.)
- Mary A. Connolly (1973)**
Professor, Child & Family Education
B.S.Ed., Ohio University
M.Ed., Wright State University
Ph.D., The Ohio State University
- Gail Cope (1972)**
Professor, Business Information Systems
B.S., Manchester College
M.A., Eastern Kentucky University
- Kay Cornelius (1997)**
Associate Professor, Mathematics
B.S., Michigan State University
M.Ed., Wright State University
- Steven Cornelius (1989)**
Chairperson, Professor, Hospitality
Management
A.S., Sinclair Community College
A.S., Cincinnati Technical College
B.A., Capital University
M.Ed., University of Dayton
- Mary A. Cox (1989)**
Professor, Nursing
B.S.N., Wright State University
M.S., The Ohio State University
(R.N.)
- Cynthia Cully (1995)**
Associate Professor, Design
B.F.A., University of Dayton
M.Des., University of Cincinnati
- Daryl Curnutte (2005)**
Instructor, Step II Coordinator,
Computer-Aided Manufacturing
A.A.S., Sinclair Community College
B.S., Nyack College
- Angela Currier (2002)**
Assistant Professor, Biology
B.S., Baldwin-Wallace College
Ph.D., Miami University
- Lori C. Cutright (1992)**
Professor, Physics
B.S., St. Joseph's College
M.S., Indiana University
- Ribhi Daoud (2000)**
Associate Professor, Economics
B.A., M.A., California State Sacramento
Ph.D., Walden University

Ronald L. Dapore (1998)

Associate Professor, Computer-Aided Manufacturing
B.R.E., Grace Bible College
M.S., Wright State University

Gloria Daughtry (1983)

Professor, Nursing
B.S.N., Tuskegee Institute
M.S.N., Mississippi University for Women
(R.N.)

R. Edward Davis (1978)

Professor, English
B.A., Concord College
M.A., West Virginia University

Walt Davis (2004)

Chairperson, Assistant Professor, Aviation Technology
B.C.E., The Ohio State University
M.B.A., University of Southern California
(Registered Engineer)

Jennifer Day (2005)

Assistant Professor, Business Information Systems
A.A.S., Sinclair Community College
B.S., Wright State University
M.S.ED., University of Dayton

Roxann DeLaet (1992)

Professor, Nursing
B.S.N., University of Akron
M.S., Wright State University
(R.N.)

Linda Denney (1983)

Professor, Computer Information Systems
B.S., B.S.Ed., Miami University
M.B.A., Wright State University

Jeff Donbar (2004)

Associate Professor, Automation & Control Technology with Robotics
B.S., University of Cincinnati
M.S., Ph.D., University of Michigan

Diane Drummer (2000)

Associate Professor, Child & Family Education
B.S., Ohio University
M.Ed., University of Cincinnati

Mary E. Dudash-White (1985)

Professor, Health Information Management
B.S., The Ohio State University
M.A., Wright State University
(R.H.I.A., C.C.S.)

Isabelita P. Duncan (1986)

Professor, Nursing
B.S.N., University of Santo Tomas
M.S.N., Indiana University
(R.N., C.S., C.N.R.N.)

Charli Dunford (1977)

Professor, Design
Certificate, Cincinnati Academy of Design

James Dunham (2002)

Assistant Professor, English
B.A., Miami University
M.F.A., Bennington College

Kimberly Dunker (2006)

Assistant Professor, Nursing
A.S., B.S., Atlantic Union College
M.S., Regis College
(R.N.)

Eric Dunn (2005)

Assistant Professor, Civil Engineering Technology
B.S., M.B.A., Wright State University

Norma J. Dycus (1976)

Professor, Physical Education
Athletic Director
A.B., MacMurray College
M.S.T., University of Illinois

Crystal Echols (1992)

Professor, Developmental Studies
B.A., Howard University
M.A., University of Dayton

Mark Echtner (1995)

Professor, Art
B.F.A., University of Wisconsin at Milwaukee
M.F.A., Miami University

Pamela G. Edwards (1988)

Professor, Dental Hygiene
A.A.S., Sinclair Community College
B.S.Ed., M.S.Ed., University of Dayton
(R.D.H.)

Suzanne M. Ehrlich-Martin (2003)

Assistant Professor, American Sign Language
B.S., Xavier University
M.Ed., Ed.D., University of Cincinnati

James Eller (1997)

Professor, Heating, Ventilation, Air Conditioning & Refrigeration Engineering Technology
B.A., Antioch University
A.M.A.R.C., United Theological Seminary

Georgann Enright (2001)

Associate Professor, Nursing
B.S.N., University of Michigan
M.S.N., Wright State University

Michael Erbe (1991)

Professor, Biology
B.S., Marietta College
M.A.T., Rhode Island College

Marlyce Erickson (1997)

Associate Professor, Developmental Studies
B.S.Ed., Concordia College
M.S.Ed., Southern Illinois University

Sherry Farra (2001)

Associate Professor, Nursing
B.S.N., Wayne State University
M.S.N., Wright State University

Dorie Farrell (1999)

Associate Professor, Sociology
B.S., M.S., University of Dayton
(L.P.C., L.S.W.)

Patti Fernandez (2002)

Assistant Professor, Developmental Studies
M.S.Ed., Wright State University

Kyle Fisk (1991)

Professor, Design
A.A.S., Sinclair Community College
B.A., Wright State University
M.Des., University of Cincinnati

Karen Fleming (2002)

Assistant Professor, Developmental Studies
B.S., M.S., University of Dayton

Dona Fletcher (1989)

Chairperson, Professor, Sociology
B.A., M.A., Fisk University

Sandra Foltz (1990)

Professor, Nursing
B.S.N., University of Cincinnati
M.S.N., Andrews University
(R.N.)

Patricia Ann Fox (1978)

Professor, Dance
B.F.A., Cincinnati College Conservatory of Music

Charles Freeland (2001)

Associate Professor, English
B.A., Miami University
M.F.A., University of Arkansas

Thomas Freels (2005)

Assistant Professor, Automotive Technology
A.A.S., B.S., Southern Illinois University

Jamie C. Fries (2004)

Assistant Professor, History
Advisor, Phi Theta Kappa
B.A., M.A., Truman State University
M.A., Ph.D., Ohio University

Sean Frost (2005)

Assistant Professor, Sociology
B.A., M.A., Michigan State University

Solomon Fulero (1981)

Professor, Psychology
B.A., University of Maryland
M.A., Ph.D., J.D., University of Oregon

Ed Gallo (2002)

Assistant Professor, Mathematics
B.S., Worcester Polytechnic Institute
M.S., University of Texas at El Paso

Michael Garblik (1983)

Professor, Automotive Technology
B.S., Bowling Green State University
M.Ed., University of Dayton

Virginia Garrett (1992)

Professor, Developmental Studies
A.B., Randolph Macon Women's College
M.A., Case Western Reserve University

Connie Garrison (1996)

Professor, Criminal Justice
A.A.S., Sinclair Community College
B.S., Wright State University
J.D., University of Dayton

Kathryn Geiselman (2000)

Assistant Professor, English
B.A., M.A.T., Indiana University

- Judy Gerhard (1995)**
Associate Professor, Political Science
Diploma, Miami Valley Hospital School
of Nursing
M.P.A., University of Dayton
- John Getrost (1990)**
Professor, Design
Diploma, Dayton Art Institute
- Albert R. Giambrone (1972)**
Chairperson, Professor, Mathematics
B.S., University of Dayton
M.S., The Ohio State University
- Jack Giambrone (2005)**
Associate Professor, Physical Education,
Assistant Athletic Director
B.S., University of Dayton
M.S., ED., The Ohio State University
- Joseph A. Giardullo (1988)**
Professor, Nursing
B.S.N., M.S.N., Wright State University
(R.N.)
- Robert Gilbert (2005)**
Assistant Professor, Architectural
Technology
B.S., M.S., University of Dayton
- Anita Gilkey (2000)**
Assistant Professor, Quality Engineering
Technology
A.T.S., Sinclair Community College
B.S., Wilberforce University
M.B.A., Jones International University
(C.Q.I.A.)
- Kjirsten Goeller (2001)**
Assistant Professor, Developmental
Studies
B.A., M.A., University of Dayton
Early Childhood Associated Credentials-
Head Start
- Gloria Goldman (1980)**
Chairperson, Professor, Nursing
B.S.N., Louisiana State University
M.Ed., Loyola University of the South
M.S., Wright State University
Ph.D., University of Dayton
(R.N.)
- Luis Samuel Gonzalez (2002)**
Chairperson, Assistant Professor,
Humanities, Government & Modern
Languages
B.A., Andrews University
M.A., Western Michigan University
J.D., Valparaiso University School of Law
- Mary E. Govan (1987)**
Professor, Accounting
B.A., University of Dayton
M.B.A., Wright State University
(Certified Public Accountant)
- John E. Graham (1973)**
Professor, Child & Family Education
B.A., Wright State University
- Patrick Greco (2001)**
Associate Professor, Chemistry
B. S., M. S., Wright State University
- Daniel Greene (1989)**
Professor, Music
B.M., M.M., Bowling Green State
University
- Myra Grinner (1997)**
Associate Professor, Communication
Arts
B.A., Wright State University
M.S., Central Michigan University
M.A., University of Dayton
- Sarah Gross (2002)**
Associate Professor, Marketing
B.S., M.B.A., University of Dayton
- George Hageman (1987)**
Professor, Art
B.S.Ed., M.A., Bowling Green State
University
M.F.A., The Ohio State University
- Carolyn J. Hannah (1998)**
Associate Professor, Computer
Information Systems
B.S., M.S., Wright State University
- Donna L. Hanshew (2005)**
Assistant Professor, Aviation Technology
B.S., Embry-Riddle Aeronautical
University
- David Hare (2005)**
Assistant Professor, Mathematics
B.A., Capital University
M.S., Ohio University
- Kevin Harris (2000)**
Associate Professor, Art
B.A., Hampton University
M.F.A., University of Cincinnati
- Susan Harris (1995)**
Professor, Mathematics
B.A., Grinnell College
M.S., Wright State University
- Tracey Harris (2001)**
Instructor, Chemistry
A.S., Sinclair Community College
B. S., Wilberforce University
- Bahar Hartmann (2004)**
Assistant Professor, Modern Languages
B.A., M.A., Wright State University
Ed.D., University of Cincinnati
- Sharon Hawkins (2005)**
Instructor, Nursing
A.A., Cuyahoga Community College
B.S.N., Ursuline College
M.P.A., Cleveland State University
(R.N.)
- Paula Heitkemper (2002)**
Assistant Professor, Nursing
B.S., M.S.N., University of Cincinnati
- Sheranita Hemphill (1989)**
Professor, Dental Hygiene
A.A.S., Sinclair Community College
B.S., M.S.Ed., University of Dayton
M.P.H., The Ohio State University
(R.D.H.)
- Anne Henry (1994)**
Associate Professor, Geology
B.S., M.S., Wright State University
- Furaha Henry-Jones (2005)**
Instructor, English
Grow Our Own Program
B.S., Pennsylvania State University
- Karl Hess (2003)**
Assistant Professor, Mathematics
A.S., Edison State Community College
B.S., Wright State University
M.A., Bowling Green State University
- Jane Hofverberg (1992)**
Professor, Occupational Therapy
Assistant
B.S., Virginia Commonwealth University
(O.T.R./L.)
- Norma Hollebeke (2005)**
Assistant Professor, Biology
B.S., M.S., University of Texas at El Paso
- Stephen Holliday (1997)**
Professor, Dental Hygiene
B.S., Capital University
D.D.S., The Ohio State University
- Donald Homan (2002)**
Associate Professor, Electronics
Engineering Technology
B.S., M.S., University of Dayton
- Rob Hoopes (2000)**
Associate Professor, American Sign
Language
B.A., University of Akron
M.A., Gallaudet University
J.D., University of Cincinnati
- James Houdeshell (1978)**
Professor, Quality Engineering
Technology
B.S., Rose-Hulman Institute
M.S., Wright State University
M.S., University of Dayton
Ed.D., Nova Southeastern University
(C.Q.A., C.R.E., P.E.)
- Shan Huang (2005)**
Assistant Professor, Physics
B.S., Soochow University
M.S., University of Oregon
- Catharine A. Huber (1980)**
Professor, Health Information
Management
B.S., The Ohio State University
M.A., George Washington University
(R.H.I.A.)
- Mark Humbert (2002)**
Assistant Professor, Psychology
B.A., Miami University
M.A., Ph.D., United States International
University
- Sharyn Hunter (2004)**
Assistant Professor, Developmental
Studies
B.A., Westminster College
M.A., Youngstown State University
M.A., University of Arizona
- DeAnn Hurtado (2002)**
Associate Professor, Business
Information Systems
B.S., Miami University, Oxford
M.B.A., University of Dayton
- Ronald L. Hutchins (1984)**
Professor, Computer-Aided
Manufacturing
A.A.S., Sinclair Community College
B.S., University of Cincinnati
(C. Mfg. E.)

- Sandra Hutchison (2004)**
Assistant Professor, Biology
B.S., University of California Los Angeles
Ph.D., Pennsylvania State University
- Elaine Isabell (1996)**
Professor, Psychology
B.A., M.A., St. Mary's University
- Shirley Ivory (1992)**
Professor, Computer Information Systems
A.S., Sinclair Community College
B.S., University of Dayton
M.S., Wright State University
- Surinder Jain (1983)**
Chairperson, Professor, Electronics Engineering Technology, Electrical & Electronics Repair Technology, Automation & Control Technology with Robotics
B.S., M.S., Punjabi University (India)
Post M.S. Diploma, Punjabi University (India)
- Bobby James (1998)**
Professor, Engineering Technology Design
B.S., Bowling Green State University
M.Ed., Central State University
- Cheryl Jefferies (2004)**
Assistant Professor, Nursing
B.A., Monterey Institute of International Studies
A.S.N., Central Texas College
B.S., M.S., Medical University of South Carolina
(R.N.)
- Wanda Jelus (1990)**
Professor, Nursing
B.S.N., University of Cincinnati
M.S., Wright State University
(R.N.)
- Amity Jetton**
Instructor, Developmental Studies
A.S., Sinclair Community College
B.S., Wright State University
- Abdullah Johnson (2002)**
Assistant Professor, Electrical & Electronics Repair
A.S., B.S., M.S., University of Maryland
- James T. Johnson (1976)**
Professor, Chemistry
B.S., Southampton College of Long Island
M.S., University of Dayton
- June K. Johnson (1974)**
Professor, Nursing
B.S., University of Cincinnati
M.S., Wright State University
(R.N.)
- Linda O. Johnson (1992)**
Professor, Nursing
B.S.N., University of Virginia
M.S., University of Oklahoma
(R.N.)
- Bruce L. Jordan (1973)**
Professor, Music
B.M.Ed., Miami University
M.M., Indiana University
- Kelly L. Joslin (2005)**
Chairperson, Assistant Professor, Art
A.A., Sinclair Community College
B.A., Antioch University-McGregor
M.Hum., Wright State University
- Rick Jurus (1988)**
Professor, Art
B.F.A., Youngstown State University
M.F.A., The Ohio State University
- Barbara J. Kabat (1973)**
Chairperson, Professor, Psychology
B.A., Seton Hill College
M.A., University of Dayton
- Gary M. Kaiser (1979)**
Professor, Respiratory Care
A.A.S., Sinclair Community College
B.S., University of Dayton
(R.R.T.)
- Tarik W. Kamil (2003)**
Assistant Professor, History
Advisor, Phi Theta Kappa
B.A., M.A., Northern Illinois University
Ph.D., Ohio University
- Lorraine Kapka (2004)**
Assistant Professor, Heating, Ventilation, Air Conditioning & Refrigeration Engineering Technology
B.S.M.E., University of Missouri
M.S.I.M., Central Missouri State University
M.S.M.E., University of Dayton
Registered Professional Engineer, Ohio
- Harmit Kaur (1984)**
Professor, Electronics Engineering Technology
B.S.E.E., Birla Institute of Technology & Science (India)
M.S.E.E., University of Roorkee (India)
- Lyn Keeler (1993)**
Professor, Mathematics
B.S., University of South Carolina
M.S., Wright State University
- Robert M. Keener (1972)**
Professor, Marketing
A.A.S., Sinclair Community College
B.S., Wright State University
M.S., The Ohio State University
- Cynthia Kennedy (1980)**
Professor, Psychology
B.S., M.A., University of Dayton
- Rex Kent (2004)**
Assistant Professor, Automotive Technology
B.A., Illinois State University
- Joseph Keyes (1990)**
Professor, Biology
B.A., Temple University
M.A., Western State College
- Mohsen Khani (1997)**
Associate Professor, Geography
B.S., M.A., Western Michigan University
- Gail Kidwell (2003)**
Assistant Professor, Nursing
A.A.S., Sinclair Community College
B.S.N., Capital University
M.S.N., Ball State University
(R.N.)
- Sarah Kiewitz (1999)**
Associate Professor, English
B.A., M.A., University of Dayton
- Kenneth E. Kimble (1975)**
Professor, Economics
A.A.S., Sinclair Community College
B.S., University of Dayton
M.Ed., University of Cincinnati
(P.A.)
- Barbara A. King (1973)**
Professor, Child & Family Education
B.A., Wilberforce University
- Jennifer King-Cooper (2002)**
Assistant Professor, Psychology
B.A., Allegheny College
M.A., Bowling Green State University
Ph.D., University of Pittsburgh
Ph.D., The Union Institute & University
- G. Scott King (1987)**
Professor, Management
B.S., Purdue University
M.A., Central Michigan University
M.B.A., Wright State University
- William G. Klopfenstein (1977)**
Professor, Biology
B.S.Ed., M.A., Bowling Green State University
Ph.D., The Ohio State University
- Kay Koeninger (2003)**
Assistant Professor, Art
B.A., Kenyon College
M.A., Eastern Washington University
M.A., University of California, Riverside
- Kenneth H. Kohlenberg (1987)**
Professor, Music
B.S., University of Michigan
B.M., M.M., Michigan State University
D.M.A., University of North Texas
- Eric Kraus (1998)**
Associate Professor, Developmental Studies
B.S., M.S., Wright State University
- William Krebs (1978)**
Professor, Civil Engineering Technology
B.C.E., J.D., University of Dayton
- Trudy Krisher (2002)**
Assistant Professor, Developmental Studies
B.A., College of William & Mary
M.Ed., Trenton State College
- Judy L. Kronenberger (1998)**
Associate Professor, Medical Assistant Technology
A.S., Sinclair Community College
B.A., Antioch University
M.Ed., University of Dayton
(C.M.A.)
- Sally Lahmon (1997)**
Associate Professor, English
B.A., M.A., Bowling Green State University
M.A., Wright State University
- Vickie Lair (2000)**
Associate Professor, Mathematics
B.S., South Dakota State University
M.A., University of Nebraska-Lincoln

- Paul Larmeu (1980)**
Professor, Spanish
B.A., M.A., Ohio University
- Diana Leakas (2003)**
Assistant Professor, Design
B.S., Miami University
- Frank Leibold (1994)**
Associate Professor, Hospitality Management
B.A., Athenaeum of Ohio
- Robert G. Leonard (2003)**
Assistant Professor, Communication Arts
A.A., Sinclair Community College
B.A., Wright State University
M.A., University of Maine
- Tess Little (1993)**
Professor, Art
B.F.A., Wright State University
M.F.A., Cranbrook Academy of Art
- Glen Lobo (2005)**
Assistant Professor, Mathematics
B.S., Indian Institute of Technology, India
M.S., A.B.D., University of Wisconsin, Milwaukee
- Lalitha Locker (2005)**
Assistant Professor, Physics
B.S., Meenakshi College, Madras University
M.S., Wright State University
M.S., University of Dayton
- Marsha J. Loges (2005)**
Assistant Professor, Management
B.S., Park College
M.S.A., Central Michigan University
M.S., Instructional College of the Armed Forces, National Defense University
- Nolan W. Long (2004)**
Assistant Professor, Music
B.S., Manchester College
M.M., University of Illinois
- LeAnn Lucas (2005)**
Assistant Professor, Psychology
B.A., Hampton University
M.A., University of New Haven
Psy.D., Wright State University
- Vicki Jo Luster (2004)**
Instructor, Radiologic Technology
A.A.S., Flathead Valley Community College
B.S., University of St. Francis (ARRT)
- Peter Maggiasco (1995)**
Professor, Computer Information Systems
A.T., B.T., University of Dayton
M.A., Webster University
- W. Terry Maiwurm (1982)**
Professor, Cooperative Education, Engineering & Industrial Technologies
B.S.Ed., Ashland University
- Anthony Mann (1983)**
Professor, Computer Information Systems
A.A.S., Sinclair Community College
B.A., M.B.A., University of Dayton
- Carolyn Mann (1980)**
Professor, Marketing
B.S., M.B.A., Wright State University
- Russell Marcks (1990)**
Professor, Heating, Ventilation, Air Conditioning & Refrigeration Engineering Technology
B.S., University of Wisconsin-Platteville
M.S., University of Kansas (Professional Engineer)
- Dwayne Masteller (2003)**
Associate Professor, Surgical Technology
B.A., McGregor School of Antioch College
M.A., Central Michigan University
- Laurel Mayer (1989)**
Professor, Humanities, Government & Modern Languages
B.A., San Jose State University
M.A., University of Maryland
Ph.D., Miami University
- Judith Mayo (2004)**
Assistant Professor, Nursing
B.S.N., Baylor School of Nursing
M.S., State University of New York, Binghamton
- Anne McCrea (1998)**
Associate Professor, Psychology
B.S., Pennsylvania State University
M.S., Ph.D., University of Florida
- Kenneth McDowell (1994)**
Professor, Biology
B.A., B.S., M.S., Ph.D., University of Illinois
- Thomas A. McElfresh (1986)**
Professor, Mental Health Technology
A.A.S., Sinclair Community College
B.A., University of Toledo
Psy.D., Wright State University
- Mary McGirr (2001)**
Associate Professor, Communication Arts
M.A., B.S., Bowling Green State University
- Lynden McIntyre (1989)**
Professor, Electronics Engineering Technology
A.S., Northwestern Michigan College
B.S., M.A., Central Michigan University
- Benjamin F. McKeever (1977)**
Professor, Developmental Studies
B.S.J., Ohio University
- Kevin McNeeley (2001)**
Associate Professor, Computer-Aided Manufacturing
B.S., M.S., Bowling Green State University
- John Mersfelder (2005)**
Assistant Professor, Biology
B.S., Capital University
M.S., The Ohio State University
- David G. Meyer (2000)**
Associate Professor, Industrial Engineering Technology
B.S., The Ohio State University
M.B.A., Jones International University (Registered Professional Engineer)
- Marcia E. Miller (1988)**
Professor, Nursing, Coordinator, Nursing Continuing Education
B.S.N., University of Cincinnati
M.S.N., University of Texas, El Paso (R.N., C.S.)
- Kathleen Mills (1994)**
Professor, Nursing
A.A.S., Sinclair Community College
B.S.N., Columbia Union College
M.S., The Ohio State University (R.N.)
- Jessica Minor (2005)**
Assistant Professor, American Sign Language
B.S., College of Charleston
M.A., Gallaudet University
- Denise Moore (1973)**
Professor, Radiologic Technology
B.S., M.S., University of Dayton (A.R.R.T.)
- Jamshid Moradmam (2005)**
Assistant Professor, Engineering Technology Design
B.S., M.S., Wright State University
- Rebecca Morean (2004)**
Assistant Professor, English
B.A., University of California Santa Barbara
M.A., State University of New York at Stony Brook
- Richard Morales (2003)**
Instructor, Communication Arts
A.A., Sinclair Community College
B.A., Wright State University
- Justin Morgan (2005)**
Instructor, Automotive Technology
B.S., Southern Illinois University
- Karen Motley (2006)**
Assistant Professor, Health Information Management
A.A.S., Sinclair Community College
B.A., The Ohio State University
- Linda D. Mowrey (2002)**
Chairperson, Assistant Professor, Mental Health Technology
B.A., California State University at Long Beach
M.S., Wright State University (L.P.C.)
- Connie W. Mullins (1987)**
Professor, Nursing
A.D., Kettering College of Medical Arts
B.S., M.S., Wright State University
- Ryan Murphy (2002)**
Associate Professor, Business Information Systems
B.S., Bowling Green State University
M.B.A., Wright State University

- Jaclynn K. Myers (1999)**
Associate Professor, Business
Information Systems
B.S., M.S.Ed., Wright State University
- Susan C. Myers (1972)**
Professor, Mathematics
B.A., Muskingum College
M.S., Miami University
- Jane Myong (1992)**
Professor, Chemistry, Geology,
Geography
B.S., University of California at Irvine
M.S., Ph.D., University of California at
Santa Barbara
- Carol Nancarrow (1996)**
Professor, English
B.A., Baylor University
M.A., Wright State University
- Kunthavi Natarajan (2000)**
Professor, Biology
B.S., M.S., University of Madras
Ph.D., University of Iowa
- Paula L. Neal (1972)**
Professor, Business Information Systems
B.S., M.A., Eastern Kentucky University
- Gina Neuerer (2003)**
Assistant Professor, Theatre & Dance
A.A., Sinclair Community College
B.A., Wilmington College
M.F.A., University of Cincinnati
- Michael Oaster (2003)**
Instructor, Emergency Medical Services
B.S., West Chester University
- Linda L. O'Keefe (1979)**
Professor, Physical Education
B.S., M.S., University of Dayton
- John P. Parcell (2004)**
Assistant Professor, Music
B.A., Florida International University
M.A., Ph.D., State University of New
York at Stony Brook
- Tina Partin (1993)**
Professor, Nursing
A.D.N., Kettering College of Medical
Arts
B.S.N., Columbia Union College
M.S.N., Wright State University
- Nila L. Peavy (1995)**
Associate Professor, Physical Education
Aquatic Director
B.S., M.Ed., University of Pittsburgh
(AEA)
- Roger F. Penn (1975)**
Professor, Chemistry
B.S.Ed., Bowling Green State University
M.S.T., Cornell University
Ph.D., The Ohio State University
- Derek A. Petrey (2003)**
Assistant Professor, Spanish
B.A., Wright State University
M.A., Ph.D., The Ohio State University
- Anthony Ponder (1991)**
Professor, Mathematics
B.S., The Ohio State University
M.Ed., Wright State University
- John Porter (2001)**
Assistant Professor, Automotive
Technology
A.S., Sinclair Community College
B.S., University of Louisville
- Michael Porter (2002)**
Associate Professor, Computer
Information Systems
B.A., Miami University
M.B.A., University of Dayton
- Thomas M. Preisser (1973)**
Professor, History
B.A., Stanford University
M.A., Northwestern University
Ph.D., College of William & Mary
- Teresa Prosser (1991)**
Professor, Developmental Studies
A.A., Sinclair Community College
B.A., M.A., University of Dayton
- Kathleen Querner (2004)**
Assistant Professor, Physical Education
B.S., M.A., Miami University
(ACE)
- Katherine Quigley (2005)**
Assistant Professor, Nursing
B.S.N., Wright State University
M.S.N., University of Cincinnati
(R.N.)
- Sue Raffee (2003)**
Assistant Professor, Dental Hygiene
EFDA Coordinator
A.A.S., Sinclair Community College
B.A., Capital University
M.S.A., Central Michigan University
(R.D.H.)
- Deanna Reas (1989)**
Professor, Psychology
B.A., Berea College
M.S., Ohio University
- Robert E. Reas (1968)**
Professor, Accounting
B.B.A., M.B.A., University of Cincinnati
(Certified Public Accountant)
- Nicholas Reeder (1998)**
Professor, Electronics Engineering
Technology
B.S.E., Princeton University
Ph.D., University of Minnesota
- Cheryl Reindl-Johnson (2002)**
Chairperson, Assistant Professor,
Business Information Systems
B.S., B.A., Wilmington College
M.A., Miami University
Ed.S., Nova Southeastern University
- Shari Rethman (1998)**
Chairperson, Associate Professor, Design
B.S. Des, M.S. Arch., University of
Cincinnati
(I.D.E.C., N.C.I.D.Q.)
- Kathleen Riehle (2001)**
Assistant Professor, Developmental
Studies
B.A., Xavier University
M.Ed., University of Cincinnati
- Nancy Rhodehamel (1998)**
Professor, Nursing
B.S.N., Wright State University
M.S.N., Andrews University
- Bob Rice (2001)**
Chairperson, Criminal Justice
B.S., Cumberland College
M.S., M.Ed., Xavier University
Ed.D., University of Cincinnati
- Daniel R. Ricica (2000)**
Associate Professor, Marketing
B.A., M.A., The McGregor School,
Antioch University
- Kim Rickard (2003)**
Assistant Professor, Developmental
Studies
B.A., M.F.A., Bowling Green State
University
- Gordon L. Robinson (1978)**
Professor, Counselor, Business
Technologies
A.B., Defiance College
M.Ed., College of William & Mary
(N.C.C., L.P.C.)
- Mary E. Robinson (2005)**
Assistant Professor, Computer
Information Systems
B.A., Creighton University
M.B.A., University of Dayton
- Vann Rogers (1996)**
Associate Professor, Experience Based
Education
B.S., Central State University
M.Ed., University of Cincinnati
L.N.H.A., The Ohio State University
- Amanda Romero (1998)**
Associate Professor, Design
A.A.S., Sinclair Community College
B.S., Wright State University
M.Des., University of Cincinnati
- Arthur Ross (1990)**
Chairperson, Professor, Physics
B.S., M.S., Bowling Green State
University
- Annette Ross (1996)**
Associate Professor, Criminal Justice
B.S., Central State University
M.S.Ed., University of Dayton
- Katherine Rowell (1996)**
Associate Professor, Sociology
Director, Honors Program
B.A., M.A., Wright State University
Ph.D., The Ohio State University
- Robert Ruckman (1981)**
Chairperson, Professor, Music
B.M., M.M., The Juilliard School
D.M.A., University of Cincinnati
- Harry L. Ruth, Jr. (1987)**
Professor, Mathematics
B.S., Miami University
M.S., The Ohio State University
- Marigrace Ryan (1993)**
Professor, Biology
B.S., Marian College
M.S., University of Cincinnati

Timothy Ryan (1990)

Professor, Design
B.S., Central State University
M.S., Wright State University

Billie Sanders (2000)

Chairperson, Associate Professor,
Physical Education
A.A., Sinclair Community College
B.S., University of Dayton
M.S., Miami University
(ACSM, ACE)

Patricia A. Santoianni (1990)

Professor, Computer Information
Systems
B.S., M.S., University of Dayton

Nicholas Scambilis (1997)

Chairperson, Professor, Fire Science
Technology, Safety Engineering
Technology, Environmental
Engineering Technology
B.S., Washington University St. Louis
M.S., University of Oklahoma
Ph.D., University of Missouri
(Registered Professional Engineer)

Nora Schaefer (1997)

Chairperson, Associate Professor,
Dietetics & Nutritional Management
B.S., Colorado State University
M.Ed., University of Cincinnati
(R.D., L.D.)

Kenneth Schmidt (2005)

Assistant Professor, Nursing
B.S.N., Wright State University
M.S.N., University of Phoenix
(R.N.)

Cynthia Schoonover (2005)

Assistant Professor, Nursing
B.S.N., Ohio Wesleyan University
M.S.N., Wright State University
(R.N.)

Debra A. Schwartz (2003)

Chairperson, Instructor, Radiologic
Technology
A.A.S., Sinclair Community College
B.S., University of Dayton
(A.R.R.T.)

Lucinda Schweller (2003)

Assistant Professor, Developmental
Studies
B.S., Bowling Green State University
M.S., Wright State University

Lynn Seery (1994)

Professor, Quality Engineering
Technology
B.S., M.B.A., University of Toledo
(C.Q.A., C.Q.E., C.Q.M.)

Bonnie S. Shane (1989)

Chairperson, Professor, Paralegal/Law
B.A., Kent State University
J.D., University of Baltimore

Martha Shapiro (2000)

Associate Professor, Nursing
B.S.N., Wright State University
M.S.N., University of Cincinnati

Robert Sherman (2000)

Associate Professor, Computer
Information Systems
B.S.Ed., University of Dayton
M.Ed., Miami University

James W. Shimko (1996)

Professor, Accounting
B.M., M.B.A., Youngstown State
University
(Certified Public Accountant)

Kathleen Shipley (1994)

Professor, Nursing
A.A.S., Sinclair Community College
B.A., Wright State University
M.S.N., University of Cincinnati
(R.N.)

Rena Shuchat (2000)

Chairperson, Associate Professor, Dental
Hygiene
B.S., M.S., The Ohio State University
(R.D.H.)

James Simonson (2003)

Assistant Professor, Emergency Medical
Services
B.A., Eastern Illinois University
M.M., University of Kansas

Thomas M. Singer (1987)

Professor, Engineering Technology
Design
A.A.S., William Rainey Harper College,
B.S.I.T., Southern Illinois University
M.A., Wright State University
(C. Mfg. T.)

Judith Skyllingstad (1987)

Professor, Disabilities Intervention
Services
B.S., M.S.Ed., University of Cincinnati
Ed.D., University of Louisville

Marc Allen Smith (1993)

Associate Professor, Biology
A.A.S., Community College of the Air
Force
B.S., Park College
M.S.A., Central Michigan University
M.S., Wright State University

Michael Smith (1993)

Professor, Developmental Studies
B.S., Wright State University
M.S., University of Dayton

Robert Smith (1991)

Professor, History
B.A., University of Toledo
M.A., The Ohio State University
Ph.D., University of Toledo

Charles W. Sowerbrower (1999)

Chairperson, Associate Professor,
Emergency Medical Services
B.S., M.Ed., West Chester University

John Stachler (1981)

Professor, Radiologic Technology
B.S.R.T., Greensboro College
(A.R.R.T.)

Vicki Stalbird (1999)

Assistant Professor, English
B.A., University of Texas
M.F.A., The Ohio State University

Jack Steinmetz (1987)

Professor, Electronics Engineering
Technology
A.S., Sinclair Community College
B.A., Bellarmine College
B.E.E., University of Dayton
M.E., Wright State University

Robert D. Stone (2000)

Associate Professor, Computer
Information Systems
B.E.E.T., DeVry Institute
M.A., Central Michigan University

David Stott (1998)

Associate Professor, Mathematics
B.S., M.S., Ohio University

David Stover (1990)

Professor, Automotive Technology
B.S., Florida International University
M.Ed., University of Dayton

D. Marie Stroh (2002)

Assistant Professor, Mathematics
B.S., M.S., Wright State University

Susan L. Sutton (1992)

Professor, Mental Health Technology
B.S., Ohio University
M.S.S.W., University of Wisconsin
(L.I.S.W.)

Charles Taylor (2002)

Assistant Professor, Automotive
Technology
A.S., Northwestern University
B.S., University of Toledo

Martha Taylor (2005)

Assistant Professor, Business Information
Systems
B.A., Hobart and William Smith Colleges
M.B.A., University of Rochester

Michael Taylor (1995)

Professor, Automotive Technology
B.S., University of Toledo
M.Ed., University of Dayton

Anitra Terrell (2000)

Assistant Professor, Marketing
B.S., Norfolk State University
M.B.A., Wright State University

Adam J. Thompson (2004)

Assistant Professor, Design
B.A., Cedarville University

Cheryl M. Thompson (1998)

Associate Professor, Geology
B.S., M.S., Wright State University

Barbara L. Tollinger (2000)

Associate Professor, Business
Information Systems
B.A., Wright State University
M.S., University of Dayton

Viet Tran (1991)

Professor, Developmental Studies
B.S., M.S., Wright State University

James Truxal (2005)

Assistant Professor, Automotive
Technology
A.A.S., Sinclair Community College
B.S., University of Dayton

- Boikai Twe (1990)**
Professor, Psychology
B.A., Berea College
Ed.D., University of Cincinnati
- Lisa Tyler (1993)**
Professor, English
B.A., M.A., University of Dayton
Ph.D., The Ohio State University
- Jeffrey L. Tyus (2000)**
Associate Professor, Communication
Arts
B.S., M.A., Ph.D., Ohio University
- Richard Uchida (2004)**
Assistant Professor, Mathematics
A.A., Long Beach City College
B.S., M.S., California State University
- Jeff Vance (1999)**
Chairperson, Associate Professor,
Economics, Financial Management,
Real Estate, Entrepreneurship
B.S., M.B.A., Wright State University
- Tim Waggoner (1999)**
Associate Professor, English
B.S., Ed., M.A., Wright State University
- Albert C. Wahle (1993)**
Chairperson, Professor, Architectural
Technology, Civil Engineering
Technology, Heating, Ventilation,
Air Conditioning & Refrigeration
Engineering Technology
C.E., University of Cincinnati
M.B.A., Wright State University
(Registered Engineer and Surveyor)
- Barbara Wallace (1993)**
Chairperson, Professor, Health
Information Management
B.S., The Ohio State University
M.B.A., Wright State University
(R.H.I.A., C.C.S., C.C.S.-P.)
- Betty Wallace (1978)**
Chairperson, Professor, Developmental
Studies
B.S., M.A., Ball State University
Ed.D., National-Louis University
- Marsha Wamsley (1999)**
Associate Professor, Clinical Coordinator,
Nursing
B.S.N., Ohio University
M.S., Wright State University
- Yufeng Wang (1993)**
Professor, History, Humanities, Chinese
B.A., Nankai University, Tianjin, China
M.A., College of William & Mary
Ph.D., West Virginia University
- Tillie Watts (1994)**
Associate Professor, Electrical &
Electronics Repair
B.S., C.I.S., DeVry Institute of Technology
M.S., Wright State University
- John Weaver (2003)**
Associate Professor, History/Humanities
B.A., Wright State University
M.A., University of North Carolina
Ph.D., The Ohio State University
- Steven Wendel (1994)**
Professor, Engineering Technology
Design
B.S.M.E., M.S.M.E., University of Dayton
- Steve Whiting (1994)**
Associate Professor, Developmental
Studies
B.S.Ed., Ohio University
M.Ed., Wright State University
- Colleen Whittington (1997)**
Chairperson, Professor, Physical
Therapist Assistant, Coordinator,
Integrative Medical Massage Therapy
B.S., The Ohio State University
M.H.S., University of Indianapolis
- Michael Whittington (1999)**
Associate Professor, Civil Engineering
Technology
B.S., The Ohio State University
M.Ed., University of Dayton
- Charles C. Williams, Jr. (1976)**
Professor, Developmental Studies
B.S., West Chester University
M.Ed., University of Pittsburgh
M.S., University of Dayton
Ed.D., Pennsylvania State University
M.Div., United Theological Seminary
- Phyllis Williams (1992)**
Chairperson, Professor, Biology
B.S.Ed., Southwestern University
M.S., University of Houston
- Susan Willin-Mulay (2000)**
Chairperson, Associate Professor,
Surgical Technology
B.S.N., Bowling Green State University
M.S.N., M.B.A., University of Phoenix
- James Willis (2003)**
Assistant Professor, Mathematics
A.A., Oakland Community College
B.S., Lawrence Technical University
M.A., Wayne State University
- Thomas Wilson (1985)**
Professor, Mathematics
B.A., Wittenberg University
M.A.T., Northwestern University
M.A., Stanford University
- Charles Winarchick (2001)**
Associate Professor, Industrial
Engineering Technology
B.S., Pennsylvania State University
M.B.A., Jones International University
- Karen Winston (1983)**
Chairperson, Professor, Child & Family
Education
B.S., M.S., Michigan State University
- Jennifer E. Wise (1998)**
Associate Professor, Safety Engineering
Technology, Environmental
Engineering Technology
B.S., Arizona University
M.S., University of Cincinnati
- Beth Withrow (2002)**
Assistant Professor, Developmental
Studies
B.S., West Virginia University
M.Ed., Wright State University
- Lewis Woodruff (1978)**
Professor, Economics, Real Estate
B.S., Wright State University
M.Ed., Ed.D., University of Cincinnati
- Richard Wourms (2001)**
Associate Professor, Computer-Aided
Manufacturing
B.A., Antioch University
M.B.A. Franklin University
- John H. Yeamans (1972)**
Professor, Management
B.S., The Ohio State University
M.A., Ball State University
(C.A.M., S.P.H.R.)
- Ned D. Young (1994)**
Chairperson, Professor, Business
Management
B.S., M.B.A., Wright State University
Ph.D., University of Dayton
- Lori Zake (1990)**
Chairperson, Professor, Communication
Arts
A.A., Sinclair Community College
B.S., University of Wyoming
M.A., Antioch University
Ph.D., University of Dayton
- Beth Zickefoose (1989)**
Professor, Respiratory Care
Director, Clinical Education
A.A.S., Sinclair Community College
B.S., University of Dayton
(R.R.T., R.P.F.T.)
- Kent Zimmerman (1982)**
Professor, Communication Arts
B.A., Manchester College
M.A., Ohio University

President Emeritus

David H. Ponitz (1975-1997)
B.A., M.A., University of Michigan
Ed.D., Harvard University

Ned J. Sifferlen (1997-2003)
B.S., M.S., University of Dayton
Ed.D., University of Cincinnati

Professor Emeritus Awards

In 1984, the Sinclair Board of Trustees approved the awarding of emeritus status to retired Sinclair faculty members who, through years of distinguished service to the college, were deemed outstanding and were nominated by their faculty colleagues and selected after careful consideration and vote of Instructional Council for this honor. Since 1984, selections each year have been made and conferred at spring graduation. The faculty members who have been so honored during this period are as follows:

Professor Helen S. Peterson (1984)
Liberal Arts & Sciences

Professor Carl M. Schell (1984)
Engineering & Industrial Technologies

Professor Robert J. Buehler (1985)
Allied Health Technologies

Professor Helen Louise Katz Froug (1985)
Liberal Arts & Sciences

Professor Mary W. Peelle (1986)
Business Technologies

Professor Robert W. Stuart (1986)
Business Technologies

Professor M. Jane Teeven (1987)
Allied Health Technologies

Professor Mark G. Treat (1987)
Business Technologies

Professor Erwin C. Vernon (1988)
Business Technologies

Professor Russell L. Moubray (1989)
Engineering & Industrial Technologies

Sr. Joseph Taddy (1989)
Allied Health Technologies

Professor John C. Elder (1990)
Extended Learning & Human Services

Professor Russell F. Jerd (1990)
Engineering & Industrial Technologies

Professor John T. Hickey (1991)
Liberal Arts & Sciences

Professor James W. Walden (1991)
Business Technologies

Professor Joseph T. Polanski (1992)
Extended Learning & Human Services

Professor Vernon C. Watson (1992)
Engineering & Industrial Technologies

Professor Ellen M. Beck (1993)
Liberal Arts & Sciences

Professor Irving L. Schwartz (1993)
Liberal Arts & Sciences

Professor John E. Burke (1994)
Business Technologies

Professor Edwina H. Byrd (1994)
Liberal Arts & Sciences

Professor Richard I. Erbaugh (1995)
Engineering & Industrial Technologies

Professor Robert L. Henn (1995)
Liberal Arts & Sciences

Professor Ralph D. Rust (1996)
Business Technologies

Professor John W. Snyder (1996)
Liberal Arts & Sciences

Professor Curtis Barnes (1997)
Fine & Performing Arts

Professor Jean I. Cook (1997)
Extended Learning & Human Services

Professor Percy O. Vera (1998)
Business Technologies

Professor Conrade C. Hinds (1999)
Liberal Arts & Sciences

Professor Eleanor S. Young (1999)
Extended Learning & Human Services

Professor Robert W. MacClennan (2000)
Fine & Performing Arts

Professor W. Lee Shadle (2000)
Allied Health Technologies

Professor Mellow D. Bradley (2001)
Extended Learning & Human Services

Professor Mary L. Navarro (2001)
Liberal Arts & Sciences

Professor B. Albert Friedman (2002)
Business Technologies

Professor Elaine V. Powell-Cope (2002)
Business Technologies

Professor Garnett McDonough (2003)
Business Technologies

Professor Paul Van Marter (2003)
Allied Health Technologies

Professor Paul A. Rab (2004)
Liberal Arts & Sciences

Professor Clarence Walls (2004)
Fine & Performing Arts

Professor Jerome M. Kinskey (2005)
Business Technologies

Professor Yvonne C. Stebbins (2005)
Liberal Arts & Sciences

Professor Peggy A. Falkenstein (2006)
Liberal Arts & Sciences

Professor Constance J. O'Neill (2006)
Business Technologies

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Advisory committees assist the college in planning, conducting, and evaluating each of the career programs. Advisory committee members are recognized leaders in their fields. They also provide counsel in the development of new programs that reflect the changing needs for trained personnel.

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Interim Dean, Business Technologies
Sinclair Community College

George Brack

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Development
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Charles Daley

Senior Tax Accountant
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CM&D

Kevin McGree

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Joyce Meers

Accountant, Ohio Casualty Insurance
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Thomas Miller

Divisional Controller
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Patrick Ruetschle

Senior Staff Accountant
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Warren Buford

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Chief Executive Officer
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Barbara Hilderbrand

Retired Manual Communication
Professor
Sinclair Community College

Doris Miller

Retired Manual Communication
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Sinclair Community College

Gary Miller

Educational Interpreter

Joan Milman-West

Retired Manual Communication
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Sinclair Community College

Ann Slaybaugh

Graduate, Manual Communication
Program
Sinclair Community College

David Slaybaugh

Member Deaf Community

Paula Vaught

Interpreter Service Administrator
Community Services for the Deaf

Dorothy Weaver

Retired Manual Communication
Professor
Sinclair Community College

Architectural Technology

Brian Choi

Principal Architect
Architects Associated, Incorporated

Karen Planet

Architect
Earl Reeder Associates

Ed Rapp

Architect
E. Lynn App Associates

Alan Scherr

Principal Architect
Alan Scherr Architects

John Westenkircher

Architect
John Poe Architects

Automation & Control Technology With Robotics

Ron Adams

DMAX Consultant

Alan Armbruster

Delphi Chassis Systems

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DT Advance Assembly Automation

Ann Centers

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Rixan Associates, Incorporated

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Carlisle Engineered Products

Michael Kohli

Kohltek

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Lau Industries

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Delphi Chassis Systems

Lou Loudtke

National Composite Center

Jean McEntarfer

Carlisle Engineered Products

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Fanuc Robotic Sales

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Vice President
Rixan Associates, Incorporated

Alessandro Rengan

Central State University

David Richard

National Composite Center

Darryl Russell

Westburne Electric

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Central State University

Jim Scheweller

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Dan Stacy

Centerville High School

Automotive Technology

Keith Booth

Automotive Instructor
Miami Valley Career Technology Center

James Brown

Technician
Montgomery County Engineers

Adam Pietrzak

Instructor
General Motors Training Center Satellite
(Sinclair)

Mike McCall

Aviation Technology

Ann Armstrong

Publications Administrator
Sinclair Community College

Erick Bickell

Miami Valley Career Technology Center

John Bosch

Commander Aero, Incorporated

Mike Disbrow

Hartzell Propeller, Incorporated

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Flight Basics, LLC
Springfield-Beckley Airport

Donna Hanshew

Professor, Aviation Department
Sinclair Community College

Jon Husted

State Representative

Amanda Wright Lane

Wright Family Representative

Jeff Leitte

Emery Worldwide Airlines

Martha Lunken

Safety Program Manager
Federal Aviation Administration

Andy Packard

Delta Air Lines, Incorporated/ComAir

Richard Pfenning

President/CEO
PSA Airlines, Incorporated

John Porter

Airborne Air Park

Jay Ratliff

Northwest Airlines

William Rudy

Lieutenant Colonel, 178th Fighter Wing
Springfield-Beckley MAP

George Sehi

Dean, Engineering & Industrial
Technologies
Sinclair Community College

Andrew Shepherd

Lab Assistant
Sinclair Community College

Ron Smith

Manager, WPAFB Aero Club
Wright-Patterson Air Force Base

Don Stark

Aviation Maintenance Coordinator
Sinclair Community College

John Thompson

Major, 178th Fighter Wing
Springfield-Beckley MAP

Dan Eiffert

ATC Specialist
Federal Aviation Administration

Kym Yahn

Work Force Development Manager
Dayton Area Chamber of Commerce

Ahti Noras

Station Chief
Delta Connection Academy

Lou Luedtke

Director
National Composite Center

Tim Gaffney

Dayton Daily News

Bernie Fullenkamp

Colonel, Commander, AFROTC
Wright State University

Biotechnology

Ralph Anderson

Anderson Consultants

Debra L. Davis

Associate Laboratory Director
Orchid-GeneScreen

William Boyko

Professor, Biology
Sinclair Community College

Angela Currier

Professor, Biology
Sinclair Community College

Jose Hanquier

Research Scientist
Eli Lilly & Company

Deborah Hoffer

Quality Control/Quality Assurance
Manager
The Rogosin Institute

Donna Jennings

Laboratory Manager, Biology
Sinclair Community College

Kunthavi Natarajan

Associate Professor, Biology
Sinclair Community College

Daniel Organisciak

Wright State University

Stephen Phanstiel

Team Leader - Bioproduct
Commercialization
Eli Lilly & Company

John Rowe

Chairperson, Biology
University of Dayton

Bill Tacon

Senior Program Director
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Sinclair Community College

Business Information Systems

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Financial Technician II
City of Dayton

Carolyn Cartwright

Executive Secretary/Human Resources
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Magistrate
Montgomery County

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Clerical Supervisor
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Regulations

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MBI Solutions

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Director, Human Resources
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Accounting
Robert Half International Incorporated

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Dayton Power & Light

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Program
Greene County Career Center

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President - Finance
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Geeham Advisory Boards

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Time Warner Cable

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Academic Counselor, Business
Technologies
Sinclair Community College

Gloria Shafer

Contract Administrator Chair
Corporate Data Center
ITW Food Group

Sheila Suel
Coordinator
Business Technologies Co-op/Internship
Program
Sinclair Community College

Evelyn Williams
Executive Secretary, ASC/YWR
Wright-Patterson Air Force Base

Business Information Systems/Medical Office Specialist

Joanne M. Coleman, C.M.T.
Business Instructor/Med. Office I & II
Warren County Career Center

Fran Coy
Administrative Manager
Medical Imaging/Centran
Miami Valley Hospital

Judy Cruea
Administrative Assistant
Marketing Communications
Children's Medical Center

Theresa Feeser, M.B.A.
Laboratory Manager
Dermatopathology Lab of Central State

Candy Henry
Assistant Supervisor/Medical Records
Combined Health District of
Montgomery County Visiting Nurses
Association

Sharon Kiser
Director of Volunteer Resources
Grandview/Southview Hospitals

Liz Kramer
Registered Nurse Practitioner
Retired, Wright Health Associates

Sharyn Morgan
Academic Counselor, Business
Technologies
Sinclair Community College

Barbara Naill, C.M.T.
Lead Transcriptionist
Greene Memorial Hospital

Mary Beth SeEVERS
Administrator & Transcriptionist

Sheila Suel
Coordinator
Business Technologies Co-op/Internship
Program
Sinclair Community College

Dan Young
Business Manager
Dayton Head and Neck Surgeons

Career Services

Wendy Callahan
Assistant Director, Career Services
Sinclair Community College

Michael Clark
Information Systems & Service
Sinclair Community College

Charlene Edwards
Ohio Fellows
Sinclair Community College

Jacalyn W. Harding
Director, Human Resources
Woolpert LLP

Stephen Hart
Vice President
Director of Quality & Testing
Reynolds & Reynolds

Ronald C. Hittle
Recruitment & Development Specialist,
Career Services
Sinclair Community College

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Associate Professor, Engineering
Technology Design
Sinclair Community College

Katrina S. Jordan
Director, Career Services
Sinclair Community College

T.R. Morton
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International Reactor Corporation

David F. Abney, II
President
Wise Construction

Bryan Bucklew
Greater Dayton Area Hospital
Association

Erman L. Cole, II
Research & Development, Ivorydale
Technical Center
Procter & Gamble

Linda Hanaway
Director, Training Services
Greater Dayton IT Alliance

Roger McDaniel
President/Owner
Duncan Oil Company

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Edison State Community College

David Radkey
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William C. Roberts, II
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Amanda Romero
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Sinclair Community College

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Dayton Job Corps Center

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Sinclair Community College

Charlotte Wharton
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Sinclair Community College

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Sunnex Incorporated

Civil Engineering Technology

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Miami County Engineering Office

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City of Dayton

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Director, Public Works
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C. David West
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CommuniQuest

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Sinclair Community College

Kyle Fisk
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Sinclair Community College

Student
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Sinclair Community College

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Sinclair Community College

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Dayton Daily News

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Vice President for Student Services
Sinclair Community College

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Huber Heights Courier

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Delphi Automotive Systems

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Select Tool & Die Corporation

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Bureau of Apprenticeship & Training

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SAIC

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Stebbins High School

Sheila Suel
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Manager, Search Services
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LexisNexis

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Software Consultant
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Computer Information Systems/User Support

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Contech Construction Products,
Incorporated

Todd Lucius
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Robert Half Technology

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I.T. Instructor
Dayton Public Schools

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Sinclair Community College

Lori Snyder
Manager, Global Support Services
NCR Corporation

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Sinclair Community College

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Meijer Stores

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Major
Dayton Police Department

Roy McGill
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Germantown Police Department

James O'Dell
Chief
Kettering Police Department

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Jeff Kruithoff
Chief
Springboro Police Department

Mike Etter
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Trotwood Police Department

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Chief
Vandalia Police Department

Richard Barnhardt
Chief
West Carrollton Police Department

Randy Person
Chief
Xenia Police Department

James Newby
Retired Chief
Dayton Police Department

Ron Labatzky
Chief
Sinclair Police Department

Ellis Willis
Training Coordinator
Sinclair Police Academy

DTMA Manpower & Training

Robert Appenzeller
General Manager
Machine Products Corporation

Robert Bremner
President
Bremner & Associates

Joe Cassano
Vice President of Manufacturing
Select Tool & Die Corporation

Antonette Flohre
Consultant
Strategies Plus

Bruce Hackett
Vice President
Estee Mold & Die, Incorporated

Paul Harper
President
C.T.M., Incorporated

David Harry
Vice President
Gem City Engineering Company

Dental Hygiene

Liz Atchley
Registered Dental Hygienist

Theresa Bonn
Registered Dental Hygienist
Sinclair Graduate

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Dean, Allied Health Technologies
Sinclair Community College

Robert Davis
Gem City Medical/Dental
Pharmaceutical Associate

Pam Edwards
Professor, Dental Hygiene
Sinclair Community College

Sheranita Hemphill
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Sinclair Community College

Stephen Holliday
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Patricia Jayson
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Glenn Jividen, Jr.
Periodontist
Private Practice

Bonita Kipling
Dentist
Private Practice

Catherine Lawler
Dentist
Private Practice

Sarah McBee
Senior Dental Hygiene Student
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Richard Morgan
Dentist, Private Practice

Ann Naber
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Sue Raffee
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Dental Hygiene
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Kathryn Strehle
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Debbie Terry
Expanded Functions Dental Auxiliary

Design Interior Design

Jon Blunt
Luken Interiors

Audrey Buckman
Go Home

Beth Hampton
Design Forum

Bob Reed
Reed Doran Associates

Sally Struthers
Dean, Fine & Performing Arts
Sinclair Community College

Shari Rethman
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Diana Leakas
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Sinclair Community College

Charli Dunford
Professor, Design
Sinclair Community College

Visual Communications

Derrick Freeman
City of Dayton

Jie Li
Flynn Sabatino & Day

Randy Palmer
Illustrator, *Dayton Daily News*

Rondi Tschopp
Five Visual Communication/Design

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Fine & Performing Arts

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Kyle Fisk
Professor, Design
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John Getrost
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Sheila Magnuson
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Dodie Munn
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Dietetics & Nutritional Management

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Tina Banning
Clinical Dietitian
Kettering Medical Center

Bobby Beavers
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Peggy Bishop
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Maria Joseph Living Care Center

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Nancy Nevin-Folino
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Standard Register Company

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Danis Building Construction Company

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Southdown, Incorporated

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Daniel Alig
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John Auberzinsky
Fire Chief, Retired
Beavercreek Fire Department

Kerry Autio
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Engineering & Fire Investigations

Karen Basso
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E. G. & G. Mound

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Ken Bratton
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Lacy Calloway
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Dayton Fire Department

Michael Caudill
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Dayton Fire Department

William Ennis
Fire Chief, Retired
West Carrollton Fire Department

Steve Etter
Lieutenant
Clayton Fire Department

Michael Hannigan
Chief
Lebanon Fire Department

David Heitz
Fire Chief, Retired
E.G.& G. Mound

Bill Hoover
Battalion Chief
Trotwood Fire Department

Michael Ludwick
Fire Chief, Retired
Bethel Township Fire Department

John Moore
Assistant Chief
Dayton Fire Department

James Nickel
Chief
Brookville Fire Department

Craig Rauch
Fire Inspector
Washington Township Fire Department

Bill Ring
Director, Retired
Miami Valley Safety Council

Jack Royer
Assistant Chief, Emergency & Support
Services
Clearcreek Township Fire Department

Randy Staley
Fire Chief, Retired
Washington Township Fire Department

Charles Wiltrott
Executive Director
Miami Valley Fire/EMS Alliance

Robert Zickler
Chief
Kettering Fire Department

Health Information Management

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Management
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Janeen Marx
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Ohio Masonic Home

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Karen Motley
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Georgia Overholser
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Upper Valley Medical Center

Kathy Pittman
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Debbie Schrubb
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Kettering Medical Center Network

Tammy Valentine
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Middletown Regional Hospital

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Good Samaritan Hospital & Health
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Margaret Wanzo
Director, Medical Records
Consumer Advocacy Model

Janice White
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Pat Willis
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Heating, Ventilating, Air Conditioning & Refrigeration Engineering Technology

Steve Brudnicki
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HVACR ET Two-Year Graduate

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Rieck Services

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Dennis Lewis
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Trane

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Crowne Plaza Hotel

John Buntmeyer
General Manager
Dayton Marriott

Steven Cornelius
Chairperson, Hospitality Management
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Patricia Deal
Faculty, Hospitality Management
Sinclair Community College

Bill Evans
Executive Director
House of Bread

Jeremy Finton
Faculty, Hospitality Management
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Greg Fitzgerald
Executive Chef/Owner
Blue Moon Cafe

Lorraine Gose
Faculty, Hospitality Management
Sinclair Community College

Jay Haverstick
Owner
Jay's Restaurant

Randy Hixon
Faculty, Hospitality Management,
Graduate
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Executive Chef, Sinclair Graduate
NCR Country Club

Bob Lambert
General Manager
Doubletree Hotel

Mark Langdon
General Manager
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Kathryn Linville
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Aramark Corporation, Dayton
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David Sauer
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Gordon Food Services

Nora Schaefer
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Herbert Schotz
Executive Chef, John F. Kennedy
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Keith Taylor
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Chef, Citi Lites

Steve Taylor
General Manager
Meadowbrook Country Club

Ron Taylor
General Manager
Carver's

Daniel Towson
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Greene County Career Center

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Barney Bishop
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Tim Collins
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Chris Cornelius
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Delphi Chassis Systems

Bill Cornn
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Carlisle Engineered Products

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Dionne Carpenter
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Alvis House

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Tim DePew
Monday Correctional Center

John DePietro
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Wanda Jackson
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Frenandis Jenkins
Alvis House

Lawrence Mack
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Beverly Pitman
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Montgomery County Adult Probation

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Supervisor
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Michael Richberg
Dayton Police Department, City Jail

Danny York
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Integrative Medical Massage Therapy

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L.M.T.
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Theisa Dohner
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