

**SUMMER QUARTER 2008** JUNE 16-AUGUST 22

- May 5-9** Priority registration for students currently enrolled and students enrolled in any of the previous four quarters
- May 12** Open registration begins
- June 6** Last day to pay without late fee for students enrolled in Summer Quarter
- June 9** Mature citizens and SOCHE registration begins
- June 11** Last day to pay for students enrolled in Summer A/C/D
- June 13** General registration 8am - 5pm  
Records Office, Rhodes Hall, Room 220  
Payment is due at time of registration
- June 14** Registration and payment; offices open 9am - 12pm; Greene Center offices open 9am - 12pm
- June 16** Summer A/C/D begin
- June 17** Last day to register/add for Summer A/C/D  
Payment due at time of registration
- July 4** College closed for Independence Day
- July 7** Last day to drop with a "W" for Summer C
- July 17** Last day to pay for Summer B
- July 18** Summer A ends  
Last day to drop with a "W" for Summer D
- July 21** Summer B begins
- Aug. 8** Last day to drop with a "W" for Summer B
- Aug. 15** Summer C ends
- Aug. 22** Summer B and D ends

**FALL QUARTER 2008** SEPTEMBER 3 - NOVEMBER 18

- May 5-9** Priority registration for students currently enrolled and students enrolled in any of the previous four quarters
- May 12** Open registration begins
- Aug. 14** Last day to pay without late fee for students enrolled in Fall Quarter
- Aug. 20** Last day to pay fees for students enrolled in Fall Quarter
- Aug. 23** Registration and payment; offices open 9am - 12pm; Greene Center offices open 9am - 12pm; Payment is due at time of registration
- Aug. 27** Mature citizens and SOCHE registration begins
- Sept. 1** College closed for Labor Day
- Sept. 3** Fall Quarter begins
- Sept. 6** Registration and payment; offices open 9am - 12 pm; Greene Center offices open 9am - 12pm
- Oct. 8-14** Midterm week
- Oct. 21** Last day to drop a Fall Quarter class with a "W"
- Nov. 11** College closed for Veterans Day
- Nov. 12-18** Final exams
- Nov. 18** Fall Quarter ends
- Nov. 27-28** College Closed for Thanksgiving  
(No Saturday classes)

**WINTER QUARTER 2009** JANUARY 5 - MARCH 21

- Nov. 4-10** Priority registration for students currently enrolled and students enrolled in any of the previous four quarters
- Nov. 12** Open registration begins
- Nov. 18** Winter Quarter Short Term fees due
- Nov. 24** Winter Quarter Short Term begins
- Dec. 12** Last day to pay without late fee for students enrolled in Winter Quarter
- Dec. 17** Last day to pay fees for Winter Quarter
- Dec. 19** General registration 8am - 5pm  
Records Office, Rhodes Hall, Room 220  
Payment is due at time of registration
- Dec. 23** Winter Quarter Short Term ends  
Mature citizens and SOCHE registration begins
- Dec. 25-26** College closed for Christmas
- Jan. 1** College closed for New Year's Day Holiday
- Jan. 3** General registration and payment; offices open 9am - 12pm  
Records Office, Rhodes Hall, Room 220  
Greene Center offices open 9am - 12pm
- Jan. 5** Winter Quarter begins
- Jan. 19** College closed - Martin Luther King Day
- Feb. 9-13** Midterm week
- Feb. 20** Last day to drop with a "W" for Winter Quarter
- Mar. 16-21** Final Exams
- Mar. 21** Winter Quarter ends

**SPRING QUARTER 2009** MARCH 30 - JUNE 12

- Feb. 16-20** Priority registration for students currently enrolled and students enrolled in any of the previous four quarters
- Feb. 23** Open registration begins
- Mar. 13** Last day to pay without late fee for students enrolled in Spring Quarter
- Mar. 18** Last day to pay fees for students enrolled in Spring Quarter
- Mar. 20** General registration 8am - 5pm  
Records Office, Rhodes Hall, Room 220  
Payment is due at time of registration
- Mar. 23** Mature citizens and SOCHE registration begins
- Mar. 28** Registration and payment; offices open 9am - 12pm; Greene Center offices open 9am - 12pm
- Mar. 30** Spring Quarter begins
- May 4-8** Midterm week
- May 15** Last day to drop a Fall Quarter class with a "W"
- May 25** College Closed - Memorial Day
- June 6-12** Final exams
- June 12** Spring Quarter ends
- June 13** Graduation

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### MISSION

The purpose of Clark State Community College is to foster individual and community prosperity through access to the highest quality, learning-centered education.

# Welcome to Clark State



Dear Students,

Welcome to Clark State! Whether you are just beginning your college career, training for a new job or career advancement, or want to take classes to brush up on your skills, I'm confident you'll find the time you spend here rewarding.

More than 3,600 students chose their community's college last year. These students are as diverse as the programs they are studying, ranging in age from late teens to baby boomers. Their reasons for choosing Clark State are simple: great education, convenient location, affordable tuition, online course offerings and credits that transfer to four-year universities.

With more than 80 degree and certificate programs in some of today's most in-demand career fields, you're sure to find the major that is right for you. Clark State continues to be a leader in online learning, offering hundreds of online courses each quarter, as well as online degrees.

Your College Catalog is designed to assist you in learning more about Clark State, our policies and your course of study. You'll also find out more about the student services and activities available on campus. For your convenience, this catalog can be accessed online at [www.clarkstate.edu](http://www.clarkstate.edu).

I wish you the best of luck as you move forward towards a college degree and a new and exciting career.

Best Regards,

Karen E. Rafinski, Ph.D.  
President

This Catalog was prepared prior to the 2008-2009 academic year for informational purposes only. The educational programs are dynamic in nature in order to stay abreast of rapid changes in technology and our world. Clark State reserves the right to alter or amend any item contained herein without notice. We encourage you to consult with your advisor or the appropriate College official for confirmation of matters that are essential to your program of study.

Clark State Community College is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, color, sex, gender, ethnicity, religion, national origin, sexual orientation, ancestry, age, marital status, veteran status, socio-economic status or physical or mental disability and any other protected group status as defined by law or College policy in its educational programs, activities, admissions or employment practices as required by Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the American with Disabilities Act and other applicable statutes.

In accordance with the Americans with Disabilities Act, it is the policy of Clark State Community College to provide reasonable accommodations to persons with disabilities. If you require disability-related accommodations, please contact the Office of Disabilities at 937.328.6019.

Please address correspondence to Clark State Community College, Post Office Box 570, Springfield, Ohio 45501 or telephone 937.325.0691.

## **ABOUT CLARK STATE**

Whether you've chosen Clark State because of our small class sizes, our devotion to quality education, our affordability or our exceptional variety of programs, we're glad you did. The following information will tell you more about Clark State and how it evolved into the outstanding learning institution it is today. It will also give you valuable insight into our mission, and how we can serve you, our students.

## **HISTORY OF THE COLLEGE**

Clark State Community College began in 1962 as the Springfield and Clark County Technical Education Program in an effort to meet the post-secondary, technical education needs of Springfield and the surrounding area. In 1966 the name was changed to Clark County Technical Institute (CCTI) and was chartered by The Ohio Board of Regents as Ohio's first technical college. In 1972, ten years after its birth, CCTI had grown to 1,000 students and officially became Clark Technical College. New programs in agriculture, business, engineering technologies, health, public services and general studies were developed in response to the community's changing educational and economic needs.

In the 1970s the College re-examined its mission and determined that programs, which can be transferred to four-year colleges, should be included as a secondary focus. In

order to accomplish this, many new courses in humanities and social sciences were added to the curriculum. By 1985 Clark Technical College had developed one of the broadest general education programs of any technical college in the state. It was this solid foundation, together with the many strong technical programs, that made the evolution to a community college a smooth and logical step.

On July 1, 1988, The Ohio Board of Regents approved the change of Clark Technical College to Clark State Community College. As a result of this action, Clark State added the Associate of Arts and Associate of Science degrees (university parallel programs) to the nearly 30 technical associate degrees and certificates it had offered for years. The College now has more than 50 degrees and certificate programs.

Today Clark State looks proudly at its past and looks forward to the future, ready to meet the needs of today's and tomorrow's students.

## **VISION**

Opportunity without boundaries, learning without end, achievement without limits.

## **MISSION**

The purpose of Clark State Community College is to foster individual and community prosperity through access to the highest quality, learning-centered education. This purpose will be achieved when:

### **Student Success**

- Students are successful in gaining entry to and advancing in the workplace, resulting in pay commensurate with skills attained and personal goals.
- Students are successful in transferring to further education consistent with skills attained and personal goals.

### **Workforce Development**

- Employers are able to improve their competitive position by accessing human resource and workforce development services.

### **Lifelong Learning**

- Students have opportunities for lifelong learning, personal growth and values development resulting in improved quality of life.

### **Access/Opportunity**

- Barriers to accessing education and training are minimized allowing diverse populations to achieve and get what they need.

### **Community Development**

- The community recognizes the College as an energizing force to address common issues, a vital community resource and a source of community pride.

## GUIDING PRINCIPLES

We believe in the power of education to change people's lives. Toward that end, we:

- place learners first.
- aspire to be innovative, accepting inherent risks.
- seek to improve continuously.
- act as good stewards of the resources with which we are entrusted.
- connect with the diverse communities we serve.
- create synergy through partnerships.
- trust, respect and care for those with whom we work and serve.
- celebrate the creativity, diversity and accomplishments of our college community.

## Assessment of Student Academic Achievement

### IMPROVING STUDENT LEARNING

The Board of Trustees, faculty and staff affirm the following: Student learning is at the core of our purpose as a College. The ability to measure learning accomplishes two purposes: it allows us to demonstrate our accountability to our various publics, but more importantly, it provides us with the capacity to impact and improve the degree of learning that happens in our College.

The College has developed a Plan to Assess Student Academic Achievement, in accordance with the requirements of The Higher Learning Commission: A Commission of the North Central Association of Colleges and Schools. The plan ensures the College has specific learning outcomes for each of its degree programs and validates that students earning degrees have achieved those outcomes. Validity measures include instructor assessment, certification examinations, national standard examinations, employer surveys, success of student transfer and evaluations by external professionals. The results of the assessment efforts are used to improve instruction as necessary to guarantee that our students can succeed in the workforce or in further education.

### FACILITIES

Clark State Community College has three campus locations. The Leffel Lane Campus, at 570 East Leffel Lane, is situated on the southern border of Springfield just north of Interstate 70. Our Downtown Campus is located in the heart of downtown Springfield. Major city streets and city bus service provide easy travel between campuses. You'll find our easy-to-follow campus maps on the inside back cover. Clark State's Greene Center is located in College Park, at 3775 Pentagon Boulevard in Beavercreek. Clark State also offers classes at other locations in the community, including Ohio Hi-Point Career Center in Logan County. These classes are included in our quarterly class schedule.

## ONLINE LEARNING

Online learning at Clark State offers alternative modes of instructional delivery for students who, for a variety of reasons, may not be able to attend traditionally scheduled classes. Clark State offers over 145 online and hybrid courses. In online courses, all instructional and lab activities are completed in an online environment. Online courses require no visits to campus; however, students may be required to use a proctored testing facility. Hybrid courses combine the elements of the traditional face-to-face classroom and online instruction. These courses require attendance at scheduled sessions on-campus or at clinical locations for lectures, labs or clinical experiences. The time spent on campus is generally 50% less than for traditional courses; the remainder of the time spent is in the online environment. The college also offers self-paced and directed learning courses. In self-paced courses, you set your own pace and can take up to two quarters to complete your coursework. Directed learning courses are self-paced courses except that class work must be completed on Clark State's campus using the provided Directed Learning Lab and its resources.

Through this initiative, accredited courses are accessible to anyone, anywhere, at any time, providing students with a convenient way to complete their degrees. Students enroll and progress through the course following an established calendar of assignments. As long as they meet the established deadlines for contributions, students can participate at times convenient for them. Online courses and programs have full approval from The Higher Learning Commission.

### ACCREDITATIONS/APPROVALS

Clark State Community College is accredited by The Higher Learning Commission: A Commission of the North Central Association of College and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, or call 1.800.621.7440.

- The Realtime/Judicial Reporting and Broadcast Caption/CART programs are approved by the National Court Reporters Association, 8224 Old Courthouse Road, Vienna, VA 22182-3808, 703.556.6272.
- The Early Childhood Education program is approved by the Ohio Department of Education for Pre-Kindergarten Associate Certification, 25 South Front Street, Columbus, OH 43215, 1.877.644.6338.
- The Registered Nursing program is approved by the Ohio Board of Nursing, 17 South High Street, Suite 400, Columbus, OH 43215-7410, 614.466.9800 or online at [www.nursing.ohio.gov](http://www.nursing.ohio.gov) and accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, NY 10006. Telephone: 1.800.669.1656, extension 153, or online at [www.nlnac.org](http://www.nlnac.org).
- The Practical Nursing program is approved by the Ohio

Board of Regents and the Ohio Board of Nursing, 17 South High Street, Suite 400, Columbus, OH 43215-7410, 614.466.9800 or online at [www.nursing.ohio.gov](http://www.nursing.ohio.gov).

- The Medical Laboratory Technology program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631. Telephone: 773.714.8880, or online at [www.naacls.org](http://www.naacls.org).
- The Paramedic program is accredited by the Ohio Department of Public Safety Services, #308-OH, Emergency Medical Services, 1970 W. Broad Street, Columbus, OH 43218-2073, Telephone 1.800.233.0785.
- The Physical Therapist Assistant program is accredited by the Commission on Accreditations in Physical Therapy Education of the American Physical Therapy Association, 1111 N. Fairfax Street, Alexandria, VA 22314. Telephone: 1.800.999.2782, or online at [www.apta.org/education/accreditation](http://www.apta.org/education/accreditation).

## Technical Degrees

Our technical degree programs are designed as two-year programs provided you attend Clark State on a full-time basis. Many of our students, however, take longer than two years to complete degree requirements. Although many courses from the technical programs are transferable, these programs are designed primarily as pre-employment programs. If you choose to complete dual majors in related associate degree programs, you should allow yourself about three additional quarters to complete both programs. The following technical degrees are offered: Associate of Applied Business (AAB), Associate of Applied Science (AAS) and Associate of Technical Studies (ATS).

### AGRICULTURE TECHNOLOGIES

Agricultural Business Technology	AAB
*Agricultural Engineering Technology Option	AAS
Horticultural Industries Technology	
Golf Course Operations Option	AAS
Landscape Design Option	AAS
Nursery Operations Option	AAS
Parks and Recreation Operations Option	AAS
Turf and Landscape Operations Option	AAS

### BUSINESS TECHNOLOGIES

Accounting Technology	AAB
Computer Networking Option	AAB
Advanced Computer Networking Option	AAB
CyberSecurity Specialist Option	AAB
Technical Systems Support Option	AAB
Computer Software Development	AAB
Graphic Design Technology	AAB
Judicial Reporting	AAB

Broadcast Captioning/CART Option	AAB
Paralegal Technology (1st year)	AAB
Management Technology	AAB
CyberSecurity Management Option	AAB
Human Resource Management Option	AAB
Logistics and Supply Chain Management Option	AAB
Marketing and E-Business Option	AAB
Office Administration Technologies	AAB
Medical Office Administration	AAB
Professional Office Administration	AAB

### INDUSTRIAL & ENGINEERING TECHNOLOGIES

CAD Drafting	AAS
Engineering Transfer	AS
Industrial Technology	AAS
Manufacturing Engineering Technology	AAS
Mechanical Engineering Technology	AAS

### HEALTH AND HUMAN SERVICES TECHNOLOGIES

Early Childhood Education	AAS
Early Childhood Education	
Administration Option	AAS
Early Literacy Option	AAS
Special Needs Option	AAS
Early Elementary Paraprofessional	AAS
Emergency Medical Services/Paramedic Technology	AAS
Medical Assisting	AAS
Medical Laboratory Technology	AAS
Nursing Transition LPN to RN	AAS
Physical Therapist Assistant Technology	AAS
Registered Nursing Technology	AAS
Registered Nursing - Evening Technology	AAS
Social Services Technology	AAS

### PUBLIC SERVICES TECHNOLOGIES

Criminal Justice Technology	AAS
Basic Police Officer Training	
Criminal Justice	AAS
Corrections Technology	AAS

### CERTIFICATE PROGRAMS

Accounting Certificate
Computer-Aided Design Certificate
Electrical Maintenance Certificate
Management Certificate
Manufacturing Certificate
Medical Assisting Certificate
Multi-Skilled Health Care Certificate
Photography Certificate
Practical Nursing Certificate

### DEPARTMENTAL CERTIFICATES

Agriculture Business Certificate
Agriculture Engineering Technology Certificate

Agriculture Equipment Certificate  
 Agriculture Pest Certificate  
 Chemical Dependency Certificate  
 Communication Certificate  
 Computer Software Development/Programming Certificate  
 Customer Service Certificate  
 Early Literacy Development Certificate  
 Electrocardiography Certificate  
 Electronics Certificate  
 EMT-Basic Certification  
 EMT-Intermediate Certification  
 Landscape Design Certificate  
 Logistics and Supply Chain Management Certificate  
 Machine Transcription Certificate  
 Marketing E-Business Certificate  
 Medical Coding Certificate  
 Medical Transcription Certificate  
 Microsoft Database Administration/Networking Certificate  
 Microsoft Database Administration/Programming Certificate  
 Network Administration Certificate  
 Network Infrastructure Certificate  
 Nurse Aide Training Certificate  
 Oracle Database Management Certificate  
 Paramedic Certification  
 Paramedic Certification for RN  
 Parks and Recreation Operations Certificate  
 Patient Care Technician Certificate  
 Phlebotomy Certificate  
 Security Wireless Certificate  
 Small Business Certificate  
 Supervisory Certificate  
 Systems Analysis Certificate  
 Technical Support Certificate  
 Theatre Arts Administration Certificate  
 Turf Certificate  
 Web Services Certificate

## ASSOCIATE OF TECHNICAL STUDIES

Clark State also offers an Associate of Technical Studies degree if your career needs are not met by one of our technical degree programs. The flexibility of this program permits you to work with an advisor to construct an inter-disciplinary degree program from present course offerings. The program may include courses from more than one technology based on your specific goals.

To pursue an Associate of Technical Studies, you need to apply prior to completing 60 credit hours. You can apply at any division office. An advisor will be assigned to work with you to devise a specific program, which must then be approved by the division administrator.

An Associate of Technical Studies program must contain at least 21 credit hours of basic courses, 23 credit hours of non-technical courses and 9 credit hours of electives.

## General Education

CORE (Common Outcomes Required in Education) is Clark State Community College's philosophy of general education, the general body of common knowledge, concepts and attitudes essential to functioning effectively in a complex, diverse and changing world. The common CORE supports learners in their journey toward life-long fulfillment.

Upon completion of an associate degree from Clark State Community College, a graduate will be able to:

- write clearly and accurately in a variety of contexts and formats.
- speak clearly and accurately in a variety of contexts and formats.
- work effectively in teams.
- use critical thinking and problem solving to draw logical conclusions.
- articulate issues or concepts from diverse perspectives.

The Assessment Committee has established tools by which student achievement of the CORE is assessed. The results of these assessments are used to improve student learning at Clark State Community College.

## REQUIREMENTS IN ENGLISH, HUMANITIES AND SOCIAL SCIENCES

As a Clark State student, you are required to complete courses that focus on the development of skills and knowledge in general education. These courses include requirements in English and Humanities/Social Sciences.

Students in technical programs take English I, English II and either Business Communications or Technical Report Writing, whichever is required.

If you are pursuing a technical degree, you must also take four courses in the humanities and social sciences (including at least one in each area). The Arts and Sciences Division recommends that you take no more than one course from each discipline (psychology, sociology, etc.).

In recognition of the growing importance of global awareness and increasing diversity, we also require that at least one of these four general education courses contain a significant amount of international material. Courses meeting this requirement are designated with a GA following each course.

Students registering for courses should use the following list:

### Social Sciences

ECO 110	General Economics*
GEO 110	World Human Geography (GA)
GEO 220	World Regional Geography (GA)
PLS 110	American National Government

PLS 120	American Issues
PLS 130	Political Issues (GA)
PLS 220	Constitutional Law
PLS 230	International Politics (GA)
PSY 111	Psychology I
PSY 230	Abnormal Psychology
RST 260	Regional Studies: Asia-China (GA)
RST 262	Regional Studies: Asia-India (GA)
RST 270	Regional Studies: Africa (GA)
RST 280	Regional Studies: Latin America (GA)
SOC 110	Sociology
SOC 140	Marriage and Family (GA)
SOC 220	Comparing Cultures (GA)
SOC 230	Social Problems
SOC 240	Racial and Cultural Minorities
SOC 250	Sociology of Poverty

### Humanities

ART 130	Appreciation of the Arts (GA)
ART 133	Art History I (GA)
ART 134	Art History II (GA)
ART 135	Art History III (GA)
ART 138	Arts of Africa (GA)
COM 111	Interpersonal Communication
COM 121	Public Speaking
ENG 130	Introduction to Literature (GA)
ENG 225	Creative Writing
ENG 230	Great Books: World Literature (GA)
ENG 231	Great Books of World Literature: Honors (GA)
ENG 241	Poetry (GA)
ENG 243	Fiction (GA)
ENG 245	Drama (GA)
ENG 250	American Literature
ENG 261	British Literature to 1700 (GA)
ENG 262	British Literature 1700-Present (GA)
HON 291	Science & Religion (GA)
HST 111	Western Civilization to the 14th Century (GA)
HST 112	Western Civilization from the 14th through the 18th Century (GA)
HST 113	Western Civilization from the 19th Century to the Present (GA)
HST 114	Western Civilization to the 14th Century: Honors (GA)
HST 121	American History to 1810
HST 122	American History 1810-1900
HST 123	American History 1900-Present
HST 220	Topics in African-American History and Culture (GA)
HUM 299	Capstone Seminar (GA)
MUS 130	Music Appreciation (GA)
PHL 110	Problems in Philosophy (GA)
PHL 111	Problems in Philosophy: Honors (GA)
PHL 200	Critical Thinking
PHL 205	Deductive Logic
PHL 210	Ethics (GA)
PHL 220	Business Ethics (GA)
PHL 230	Medical Ethics (GA)
PHL 240	Philosophy of World Religions (GA)

PHL 250	Great Books: Philosophy (GA)
SPN 100	Conversational Spanish (GA)
THE 105	Oral Interpretation of Literature
THE 130	Introduction to Theatre (GA)
THE 133	Script Analysis
THE 241	Theatre History I (GA)
THE 242	Theatre History II (GA)
The 243	Theatre History III (GA)

\*ECO 110 cannot be used as a general education elective for the Accounting, Management or Marketing and E-Business programs.

## Transfer Options

Students commonly combine credits to reach an academic goal such as an associate degree or a baccalaureate degree. Transferring credit includes the mobility between high school and college institutions; between two or more colleges, for example, community college to community college, or between a community college and a four-year institution. For the high school student, it may include transferring college credit received during high school to an institution of higher education. This may have been accomplished through Tech Prep, Post Secondary Educational Opportunities (PSEO), Dual Enrollment, or articulated credit from a Career Center.

Many students who begin their college career at Clark State Community College (CSCC) intend to transfer their CSCC credits to a university to obtain a baccalaureate degree. The Associate of Arts degree or the Associate of Science degree at Clark State Community College are the transfer degrees and are designed to facilitate that process. Information on the Ohio Transfer Module (OTM), the Transfer Assurance Guidelines (TAGS), and the Course Applicability System (CAS) explains in detail how to use these advising tools to choose courses for a seamless transition to the transfer institution. In addition, Clark State has developed university parallel transfer degrees through articulation agreements with most four-year colleges and universities in the area.

Students who seek an Associate of Applied Business degree or Associate of Applied Science degree do so to readily obtain employment with skills gained in CSCC technical courses/curriculum. While these programs are not necessarily designed to transfer to most four-year institutions/universities, there are specific universities that have developed baccalaureate degrees to accommodate the AAB and AAS students. Clark State has developed articulation agreements with many of these universities.

All students should work with their academic advisor to develop academic goals, including quarterly schedules that would facilitate a timely transition to a four-year institution.

Clark State Community College also serves students whose goal it is to obtain occasional credit to transfer back to a

home institution. This is referred to as transient coursework. Interested students should meet with their home institution's academic advisor to select the appropriate coursework from CSCC. Upon enrolling in CSCC, an academic advisor, as well as the Records and Registration office, will assist the student with necessary documentation.

The following Information can be found in this section of the catalog:

- Guidelines for Effective Transfer
- Course Applicability System (CAS)
- Wright State University Transfer Options
- Franklin University Transfer Options
- Urbana University Transfer Options
- Institutional Transfer
- Transfer Module (OTM)
- Transfer Assurance Guidelines (TAGS)
- Transfer Admission
- Acceptance of Transfer Credit
- Student Responsibilities
- Appeals Process
- Transferring Credit to Clark State

## **GUIDELINES FOR EFFECTIVE TRANSFER**

- Determine the four-year college or university to which you will transfer and your prospective major as early as possible in your academic program.
- Request a catalog from the prospective transfer institution early and become familiar with its admissions policies, scholarship options/deadlines and degree requirements.
- Generally, you'll receive credit for most of your courses at the transfer institutions if you have worked carefully with Clark State advisors and with personnel at the prospective transfer institutions. The transfer institutions, however, will make the final determinations.
- A minimum of 92 credit hours are required to graduate with a Clark State Associate of Art or Associate of Science degree.
- Work with an advisor and sign up for appropriate courses each quarter.

The primary purpose of the AA and AS degrees is to provide transfer credit to four-year colleges and universities. Students readily transfer to other institutions in areas such as Business, Psychology, English, Theatre, Sociology, Urban Affairs, Art, Agriculture, Education, Engineering Sciences and Engineering Technologies.

More than half of the CSCC transfer students are traditional students between the ages of 18 and 22. Tuition and fees at Clark State are about 50 percent less than those of public four-year institutions. This, coupled with small classes and a low student-to-instructor ratio, makes Clark State a great place to earn the first two years of a bachelor's degree.

Clark State Community College has transfer agreements with the following four-year institutions for students completing AA and AS transfer degrees and/or students completing AAS and AAB Technical degrees.

- Antioch, McGregor
- Capital University
- Central State University
- Defense Acquisition University
- DeVry Institute of Technology
- Franklin University and Franklin University Community College Alliance Programs
- Miami University, College of Applied Science
- Mount Vernon Nazarene University
- Ohio Dominican University
- The Ohio State University
- Park University
- University of Cincinnati, UC College of Business
- University of Phoenix
- University of Toledo
- Urbana University
- Wilberforce University
- Wittenberg University
- Wright State University

## **COURSE APPLICABILITY SYSTEM (CAS)**

Clark State Community College is a member of Ohio's Course Applicability System (CAS). Information about the transferability of Clark State Community College's credit hours may be found by accessing CAS at <http://www.transfer.org>. Students interested in transferring credits to Clark State Community College may access CAS to determine credit equivalency. Please note that not all colleges/universities are listed in CAS. To verify credit transferability, please submit your official transcripts to the Admission's Office, Clark State Community College, PO Box 570, Springfield, Ohio 45501. The Course Applicability System (CAS) was developed as an online tool that serves as a gateway to participating institutions' automated degree audit and transfer articulation systems. Upon creating a free account in CAS, students and/or parents may view course equivalencies, see program requirements, enter and store coursework, and request an evaluation of transfer work toward a specific program.

## **WRIGHT STATE UNIVERSITY TRANSFER OPTIONS**

Wright State University has developed the following articulation (transfer) agreements. These agreements outline which courses students should take in order to complete an associate degree at their current institution and to transfer into the specific major(s) indicated on the agreement.

Art/Art History  
Biological Science  
Biomedical Engineering  
Business  
Business Education



Chemistry  
 Clinical Lab Science  
 Communication  
 Computer Science (Bioinformatics and Business options)  
 Early Childhood  
 Electrical Engineering  
 Engineering Physics  
 English Education  
 Environmental Sciences  
 Exercise Biology  
 Health and Physical Education  
 History  
 Industrial and Systems Engineering  
 Liberal Arts  
 Mathematics  
 Mechanical Engineering  
 Middle Childhood Education  
 Nursing  
 Nursing Completion  
 Organizational Leadership  
 Physics  
 Political Science  
 Psychology  
 Rehabilitation Services  
 Social Sciences Education  
 Social Work

In addition to these transfer guides, Clark State and Wright State have developed curriculum specific transfer guides for the following degrees. These guides are included in the Degree programs section of the catalog.

- Pre-Business
- Pre-English
- Pre-Psychology (BA)
- Pre-Psychology (BS)
- Pre-Social Work

## FRANKLIN UNIVERSITY TRANSFER OPTIONS

Through a special alliance with Franklin University, graduates of technical programs (Associate of Applied Business or Associate of Applied Science degrees) at Clark State can complete a Bachelor of Science degree online with the completion of a selected number of additional bridge courses at Clark State and 40 semester hours (the equivalent of approximately 1 ½ years) at Franklin. All Clark State courses are referred to as Bridge courses, and all Franklin courses are referred to as Completion courses. Clark State graduates that are part of the Alliance program are able to continue using the Clark State library, computer labs, and other resources while they continue their studies at Franklin University.

With this program, a student completes an associate degree at Clark State in a technical area such as management, manufacturing engineering technology, physical therapist assistant, corrections or any of our other applied programs. The student then determines which of 16 different majors he or she would like to pursue at Franklin. A student also

completes any additional bridge courses at Clark State that he or she has not already taken—all at Clark State prices. The following Clark State courses are part of the general education bridge for most Franklin University majors:

ENG 111	English I	4
ENG 112	English II	4
ENG 221	Business Communication or	
ENG 223	Technical Report Writing	3
ECO 221	Macroeconomics or	
ECO 222	Microeconomics	3
COM 111	Interpersonal Communication or	
COM 121	Public Speaking	3
ITS 12D	Beginning Database	1
ITS 12S	Beginning Spreadsheet	1
STT 264	Statistics I	4
MTH 121	College Algebra I	3
---	Science Elective (chemistry, physics, biology, geology)	
---	Social/Behavioral Science Elective (sociology, psychology, political science)	
---	Humanities Elective (ethics, philosophy, literature)	

The following Clark State courses are part of the business core bridge for most Franklin University majors that require a business core:

ACC 111	Principles of Accounting I	4
ACC 112	Principles of Accounting II	4
ACC 113	Principles of Accounting III	4
MGT 112	Principles of Management	4
MKT 200	Principles of Marketing	4
MGT 260	Legal Environment of Business	3
MGT 270	Business Finance	4

Each Franklin University major also identifies specific Clark State courses as part of the technical or major area bridge. A few majors include additional general education bridge courses. All other courses taken as part of the associate degree at Clark State become part of the elective bridge courses.

Students can find a separate Bridge and Completion guide for each Franklin University major on the Clark State web site. Students should consult with their academic advisor or the coordinator of Articulation and Transfer for assistance with these guides. The majors currently available at Franklin University via this alliance include:

Accounting  
 Applied Management  
 Business Administration  
 Business Forensics  
 Computer Science  
 eMarketing  
 Financial Management  
 Forensic Accounting

Healthcare Management  
Human Resources Management  
Information Technology  
Management  
Management Information Sciences  
Marketing  
Public Safety Management  
Web Development

## URBANA UNIVERSITY TRANSFER OPTIONS

Clark State Community College students who successfully complete Clark State's Associates of Applied Science degree requirements and otherwise meet Urbana University's admissions requirements will be accepted into Urbana University's School of Adult and Graduate Education in accordance with Clark State and Urbana University's seamless articulation agreements.

Urbana University's Bachelor of Science Completion programs are grounded in adult education theory, offer direct admission to upper division studies with block credit granted for professional courses completed as part of an applied associated degree. No challenge exams or prior knowledge validations are required. A professional license/certification in the respective discipline confirms the student's readiness to undertake a degree completion program.

Urbana University's "Seamless Alliance Program" outlines the courses that a student needs to successfully complete, based on the Associates degree they have earned, for a Bachelor of Science Degree from Urbana University. "Seamless" articulation agreements are available in the following Clark State programs and are provided below.

- Associate of Applied Science in Nursing to Urbana University's degree completion for Bachelor of Science in Nursing
- Associate of Applied Science in Physical Therapy Assistant to Urbana University's degree completion for Bachelor of Science in Healthcare Management.
- Associate of Applied Science in Medical Laboratory Technology to Urbana University's degree completion for Bachelor of Science in Healthcare Management.
- Associate of Applied Business in Accounting to Urbana University's Bachelor degree completion for Bachelor of Science in Business – Accounting
- Associate of Applied Business in Management to Urbana University's Bachelor degree completion for Bachelor of Science in Business-General Management
- Associate of Applied Business in Human Resource Management to Urbana University's Bachelor degree completion for Bachelor of Science in Business-Human Resource Management
- Associate of Applied Business in Marketing to Urbana University's Bachelor degree completion for Bachelor of Science in Business-Marketing
- Associate of Applied Business in Management to Urbana University's Adult Education Bachelor degree completion

for Bachelor of Science in Business Management with an emphasis in Organizational Leadership

- Associate of Applied Science in Criminal Justice to Urbana University's Adult Education Bachelor degree completion for Bachelor of Science in Criminal Justice Leadership
- Associate of Applied Science in Social Service Technology to Urbana University's Adult Education Bachelor degree completion for Bachelor of Science in Human Services Leadership

## POLICY OF STATEWIDE ARTICULATION AGREEMENT INSTITUTIONAL TRANSFER

The Ohio Board of Regents in 1990, following the directive of the 119th Ohio General Assembly, developed the Ohio Articulation and Transfer 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. A subsequent policy review and recommendations produced by the Articulation and Transfer Advisory Council in 2004, together with mandates from the 125th Ohio General Assembly in the form of Amended Substitute House Bill 95, have prompted improvements of the original policy. While all state-assisted colleges and universities are required to follow the Ohio Articulation and Transfer Policy, independent colleges and universities in Ohio may or may not participate in the transfer policy. Therefore, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements. In support of improved articulation and transfer processes, the Ohio Board of Regents will establish a transfer clearinghouse to receive, annotate, and convey transcripts among state-assisted colleges and universities. This system is designed to provide standardized information and help colleges and universities reduce undesirable variability in the transfer credit evaluation process.

## 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 curriculum in AA, AS and baccalaureate degree programs. Students in applied associate degree programs may complete some individual transfer module courses within their degree program or continue beyond the degree program to complete the entire transfer module. The Transfer Module contains the following:

- 54-60 quarter hours or 36-40 semester hours of course credit in English composition (minimum 5-6 quarter hours or 3 semester hours).
- Mathematics, statistics and formal/symbolic logic (minimum of 3 quarter hours or 3 semester hours).
- Arts/humanities (minimum 9 quarter hours or 6 semester hours).
- Social and behavioral sciences (minimum of 9 quarter hours or 6 semester hours).

- Natural sciences (minimum 9 quarter hours or 6 semester hours).

Oral communication and interdisciplinary areas may be included as additional options.

Additional elective hours from among these areas make up the total hours for a completed Transfer Module. Courses for the Transfer Module should be 100- and 200-level general education courses commonly completed in the first two years of a student's course of study. Each state assisted university, technical and community college is required to establish and maintain an approved Transfer Module.

Transfer Module course(s) or the full module completed at one college or university will automatically meet the requirements of individual Transfer Module course(s) or the full 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 transfer 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 have general education courses that go beyond its Transfer Module. State policy initially required that all courses in the Transfer Module be completed to receive the benefit in transfer. However, subsequent policy revisions have extended this benefit to the completion of individual Transfer Module courses on a course-by-course basis.

Select courses to fulfill the minimum requirements in each section below.

- Complete the remaining hours of the Transfer Module by selecting additional courses listed in any of the sections to total the 54 quarter hours required for the Transfer Module. *(Note: Be sure to check with your academic advisor to ensure that the courses selected are appropriate for the major and the transfer institution selected and that they are consistent with the minimum graduation requirements of this institution. Also, check the college catalog for any prerequisites required.)*
- Please note that Clark State students completing the AA or AS degree requirements will have satisfied this Transfer Module (unless program articulation agreements signed by other colleges and universities dictate otherwise).

## ENGLISH COMPOSITION

Complete ENG 111 and ENG 112.

COM 111	Interpersonal Communication	3
COM 121	Public Speaking	3
ENG 111	English I	4
ENG 112	English II	4
ENG 221	Business Communications	3
ENG 223	Technical Report Writing	3
ENG 225	Creative Writing	3

## MATHEMATICS

Complete a minimum of three quarter hours chosen from:

MTH 105	Mathematics and Today's World	3
MTH 120	College Algebra IA	5
MTH 121	College Algebra I	3
MTH 122	College Algebra II	3
MTH 140	Trigonometry	3
MTH 220	Calculus for the Management, Life and Social Sciences	5
MTH 221	Calculus I	5
MTH 222	Calculus II	5
MTH 223	Calculus III	5
MTH 224	Calculus IV	5
MTH 230	Differential Equations	5
MTH 240	Linear Algebra	3
STT 264	Statistics I	4
STT 265	Statistics II	4

## ARTS AND HUMANITIES

Complete nine quarter hours by choosing either: six quarter hours from category A and three quarter hours from category B or three quarter hours from category A and six quarter hours from category B.

### Category A

ART 130	Appreciation of the Arts	3
ART 133	Art History I	3
ART 134	Art History II	3
ART 135	Art History III	3
ART 138	Arts of Africa	3
ENG 130	Introduction to Literature	3
ENG 230	Great Books: World Literature	3
ENG 231	Great Books of World Literature: Honors	3
ENG 241	Poetry	3
ENG 243	Fiction	3
ENG 245	Drama	3
ENG 250	American Literature	3
ENG 261	British Literature to 1700	3
ENG 262	British Literature 1700-Present	3
THE 105	Oral Interpretation of Literature	3
THE 130	Introduction to Theatre	3
THE 133	Script Analysis	3
THE 241	Theatre History I	4
THE 242	Theatre History II	4
THE 243	Theatre History III	4

### Category B

HST 111	Western Civilization through the 14th Century	3
HST 112	Western Civilization from the 14th to the 18th Century	3
HST 113	Western Civilization from the 19th Century to the Present	3
HST 114	Western Civilization to the 14th Century: Honors	3
HST 121	American History to 1810	3
HST 122	American History 1810-1900	3

HST 123	American History 1900-Present	3	CHM 114	Intro to General Chemistry Review	4
PHL 110	Problems in Philosophy	3	CHM 115	Intro to General Chemistry	5
PHL 111	Problems in Philosophy: Honors	3	CHM 116	Intro to Organic Chemistry	5
PHL 200	Critical Thinking	3	*CHM 121	General Chemistry I	5
PHL 205	Deductive Logic	3	CHM 122	General Chemistry II	5
PHL 210	Ethics	3	CHM 123	General Chemistry III	5
PHL 220	Business Ethics	3			
PHL 230	Medical Ethics	3	CHM 211	Organic Chemistry I	5
PHL 240	Philosophy of World Religions	3	CHM 212	Organic Chemistry II	5
PHL 250	Great Books: Philosophy	3	CHM 213	Organic Chemistry III	5

## SOCIAL AND BEHAVIORAL SCIENCES

Complete nine quarter hours chosen from at least two different subject areas from among the following:

ECO 110	General Economics	3
ECO 221	Principles of Macroeconomics	3
ECO 222	Principles of Microeconomics	3
GEO 110	World Human Geography	3
GEO 220	World Regional Geography	3
PLS 110	American National Government	3
PLS 120	American Issues	3
PLS 130	Political Issues	3
PLS 220	Constitutional Law	3
PSY 111	Psychology I	3
PSY 112	Psychology II	3
PSY 221	Human Growth & Development I	3
PSY 222	Human Growth & Development II	3
PSY 230	Abnormal Psychology	3
RST 260	Regional Studies: China	3
RST 262	Regional Studies: India	3
RST 270	Regional Studies: Africa	3
RST 280	Regional Studies: Latin America	3
SOC 110	Sociology	3
SOC 140	Marriage and Family	3
SOC 220	Comparing Cultures	3
SOC 230	Social Problems	3
SOC 240	Racial and Cultural Minorities	3
SOC 250	Sociology of Poverty	3

## NATURAL AND PHYSICAL SCIENCES

Complete one three-course sequence in the same science chosen from the sequences with asterisks or complete three courses from three separate content areas.

BIO 110	Fundamentals of Human Biology	4
BIO 143	Cell Biology/Genetics	5
*BIO 141	Evolution, Diversity and Ecology	5
BIO 142	The Human Organism	5
*BIO 121	Anatomy & Physiology I	4
BIO 122	Anatomy & Physiology II	4
BIO 123	Anatomy & Physiology III	4
BIO 131	Microbiology	4
BIO 140	Plant Science	4
CHM 110	Fundamentals of Chemistry	5

*GLG 131	Physical Geology	5
GLG 132	Historical Geology	5
GLG 133	Environmental Geology	5
GLG 121	Meteorology	4
PHY 105	Fundamentals of Scientific Methods	3
PHY 110	Fundamentals of Physics	5
*PHY 111	Technical Physics I	4
PHY 112	Technical Physics II	4
PHY 113	Technical Physics III	4
PHY 120	Astronomy	4
*PHY 250	General Physics I	6
PHY 251	General Physics II	5
PHY 252	General Physics III	5

## TRANSFER ASSURANCE GUIDES

Transfer Assurance Guides (TAGS) comprise Transfer Module courses and additional courses required for an academic major. A TAG is an advising tool to assist Ohio's university and community and technical college students planning specific majors to make course selections that will ensure comparable, compatible, and equivalent learning experiences across the state's higher-education system. A number of area-specific TAG pathways in the arts, humanities, business, communication, education, health, mathematics, science, engineering, engineering technologies, and the social sciences have been developed by faculty teams.

TAGs empower students to make informed course selection decisions and plans for their future transfer. Advisors at the institution to which a student wishes to transfer should also be consulted during the transfer process. Students may elect to complete the full TAG or any subset of courses from the TAG. Because of specific major requirements, early identification of a student's intended major is encouraged.

## CONDITIONS FOR TRANSFER ADMISSION

- Ohio residents with associate degrees from state-assisted institutions and a completed, approved Transfer Module shall be admitted to a state institution of higher education in Ohio, provided their cumulative grade point average is at least 2.0 for all previous college-level courses. Further, these students shall have admission priority over out-of-state associate degree graduates and transfer students.
- When students have earned associate degrees but have

not completed a Transfer Module, they will be eligible for preferential consideration for admission as transfer students if they have grade point averages of at least a 2.0 for all previous college-level courses.

- In order to encourage completion of the baccalaureate degree, students who are not enrolled in an AA or AS degree program but have earned 60 semester or 90 quarter hours or more of credit toward a baccalaureate degree with a grade point average of at least a 2.0 for all previous college-level courses will be eligible for preferential consideration for admission as transfer students.
- Students who have not earned an AA or AS degree or who have not earned 60 semester hours or 90 quarter hours of credit with a grade point average of at least a 2.0 for all previous college-level courses are eligible for admission as transfer students on a competitive basis.
- Incoming transfer students admitted to a college or university shall compete for admission to selective programs, majors, and units on an equal basis with students native to the receiving institution.

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 native students. Furthermore, transfer students shall be accorded the same class standing and other privileges as native students on the basis of the number of credits earned. All residency requirements must be completed at the receiving institution.

### **ACCEPTANCE OF TRANSFER CREDIT**

To recognize courses appropriately and provide equity in the treatment of incoming transfer students and students native to the receiving institution, transfer credit will be accepted for all successfully completed college-level courses completed in and after fall 2005 from Ohio state-assisted institutions of higher education. Students who successfully completed AA or AS degrees prior to fall 2005 with a 2.0 or better overall grade point average would also receive credit for all college-level courses they have passed. (See Ohio Articulation and Transfer Policy, Definition of Passing Grade and Appendix D). While this reflects the baseline policy requirements, individual institutions may set equitable institutional policies that are more accepting.

Pass/fail courses, credit by examination courses, experiential learning courses, and other non-traditional credit courses that meet these conditions will also be accepted and posted to the student record.

### **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. Students should use the Transfer Module, Transfer Assurance Guides, and a Course Applicability System for guidance in planning the transfer process. 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**

Following the evaluation of a student transcript from another institution, the receiving institution shall provide the student with a statement of transfer credit applicability. At the same time, the institution must inform the student of the institutions' appeals process. The process should be multi-level and responses should be issued within 30 days of the receipt of the appeal.

### **TRANSFERRING CREDIT TO CLARK STATE COMMUNITY COLLEGE**

Whether a student is planning on transferring credit to complete an associate degree at Clark State or would like to enroll in an occasional class to transfer back to a home institution, Clark State needs to receive an official transcript from the originating institution. Upon receiving an official transcript, Clark State will evaluate it for transfer credit. An official transcript must be on file within the first quarter of attendance at Clark State. An unofficial copy of a transcript with posted grades may be sufficient for first quarter advising. Clark State has agreed to accept credit from colleges and universities accredited by regional accrediting associations.



# Student Services

2008  
2009

Experience everything Clark State has to offer! From financial aid and scholarship opportunities to career placement and tutoring services, successful students take advantage of Student Services.

# Getting Started

Clark State Community College is committed to providing each student with the maximum opportunity to develop and learn. As such, we adhere to an Open Admissions policy.

Admission to the College is offered to applicants who are high school graduates or possess GED equivalency; to applicants over 18 years of age, who have the ability to benefit from the College's programs or courses; and to applicants eligible to participate in the various special programs offered at the College.

Admission to the College does not assure admission to a particular program of study. Many technologies have established additional requirements that must be fulfilled prior to acceptance. All prospective applicants are encouraged to contact the Admissions Office for specific information.

For some students, additional coursework in science, mathematics and English may be needed prior to enrollment in certain courses and programs. Such coursework is determined through a review of a student's past academic record or through the College's Placement Test. While all degree programs can be completed in two years of full-time study, it may take longer for some students. This is particularly true if the student is attending on a part-time basis, if the student needs to take college preparatory courses or if the student is also working.

Once you have decided Clark State is the right college for you, there are a few things you need to do to get started:

*(Note: The buildings and phone numbers listed below are for Clark State's Leffel Lane Campus located at 570 E. Leffel Lane, Springfield, OH. If it is more convenient for you, you can complete many of these steps at our Greene Center located behind the Fairfield Commons Mall at 3775 Pentagon Blvd., Beavercreek, OH 45431. (You may contact the Greene Center at 937.429.8819 or [zelinskis@clarkstate.edu](mailto:zelinskis@clarkstate.edu) for more specific information.)*

- **Apply for Admission** – Sara T. Landess Technology & Learning Center, Room 120. You may also complete an application online at <http://www.clarkstate.edu/application.html>. If you have questions, please contact the Admissions Office at 937. 328.6028 or [admissions@clarkstate.edu](mailto:admissions@clarkstate.edu)
- **Apply for Financial Aid** - Rhodes Hall, Room 210. If you need help paying for your education, you must complete a FAFSA (Free Application for Federal Student Aid) and our Financial Aid Office application online at <http://www.clarkstate.edu/finaid.html>. If you have questions, please visit the Financial Aid Office. You may also contact them at 937.328.6034 or [finaid@clarkstate.edu](mailto:finaid@clarkstate.edu).
- **Request that your college transcripts be sent to our Admissions Office** if you have previous college credits for transfer to Clark State or you are registering for a class that requires prerequisites. If you are entering either of the Realtime Reporting programs, you must submit your high school transcript, too. Transcripts should be sent to the Admissions Office, P.O. Box 570, Springfield, OH 45501. Transcripts must be received in a sealed envelope in order to be considered "official".
- **Take the Compass Placement Test** – Success Center, Room 117, Sara T. Landess Technology and Learning Center. This test will determine the level of classes you will have the most success during your first quarter at Clark State. No appointment is necessary. Testing is available from 8:30am – 7pm Monday through Thursday and from 8:30am – 4pm on Fridays. Allow yourself 1 ½ - 2 hours to take the tests. Testing may not be necessary if you have transfer English and math college courses or adequate ACT or SAT scores. Your transcripts or scores must be on file at the time of registration. You may contact the Success Center at 937.328.3847 or [successcenter@clarkstate.edu](mailto:successcenter@clarkstate.edu)
- **Meet with an Advisor to schedule classes** – Sara T. Landess Technology & Learning Center, Room 120. All first-time Clark State students must meet with a general academic advisor to schedule their classes. Please call 937.328.6028 to make an appointment with an academic advisor. You need to complete the COMPASS Placement Test or have your previous college transcripts on file with us before meeting with an academic advisor. Advisors are available from 9am – 7pm, Monday through Thursday and from 8am – 5pm on Friday. For specific advising questions, please contact 937.328.8071 or an advisor at [advisors@clarkstate.edu](mailto:advisors@clarkstate.edu).
- **Obtain your schedule from Records & Registration** – Rhodes Hall, Room 220. Your general academic advisor will help you complete a schedule request card. You will submit this card to the Records & Registration Office to obtain your student schedule and view your bill. You may contact the Records and Registration Office at 937.328.6015 or [records@clarkstate.edu](mailto:records@clarkstate.edu)
- **Pay for your classes or set up a payment plan** – Cashier's Office, Rhodes Hall, Room 211. Payment may be submitted in person or over the phone with a credit card by phone at 937.328.6048 or [cashier@clarkstate.edu](mailto:cashier@clarkstate.edu). In addition, student health insurance information is available in the Cashier's Office or on-line at [http://www.clarkstate.edu/clinic\\_ins.html](http://www.clarkstate.edu/clinic_ins.html).
- **Attend New Student Orientation** – Students are encouraged to attend an orientation session prior to registering for classes. To register for orientation, please call 937.328.6084 or register online at <http://www.clarkstate.edu/orientation.html>. If you cannot

attend an orientation session prior to meeting with an academic advisor, you may complete an online orientation during your academic advising appointment.

- **Purchase your books and supplies and pick up your parking pass** – Rhodes Hall, Room 103 or at the Greene Center. Bring your class schedule to the bookstore so that you can choose the correct books. You may also purchase your books online at <http://bookstore.clarkstate.edu>. If you are receiving financial aid to help pay for your books, you must bring a photo ID with you to the bookstore. You may contact the bookstore at 937.328.6099 or [bookstore@clarkstate.edu](mailto:bookstore@clarkstate.edu). Parking passes must be displayed in your vehicle when you are using Clark State's parking lots. You can pick up your parking pass request form from the bookstore cashier. Parking is FREE.
- **Obtain your student ID** - Rhodes Hall, Room 220. One week after the start of the quarter, photo IDs will be taken in the Records and Registration office. Please bring an existing photo ID with you.
- **Have your student ID validated** - Library, Sara T. Landess Technology and Learning Center, Room 122. After obtaining your student ID, you must have it validated each quarter. This enables you to check out materials. You may contact the Library at 937.328.6022 or [library@clarkstate.edu](mailto:library@clarkstate.edu).
- **If you're undecided about your major, need help finding a job or career advice, visit our Office of Career Management** - Sara T. Landess Technology and Learning Center, Room 110. You may also contact them at 937.328.6093 or [careers@clarkstate.edu](mailto:careers@clarkstate.edu).

## What Kind of Student Are You?

### HIGH SCHOOL STUDENT

High school students have a variety of options to earn college credits before they graduate. To learn more about becoming a Clark State student while you are still in high school, contact your high school's guidance counselor or the Admissions office at 937.328.6028 or 937.429.8819.

- Post-Secondary Enrollment Option
- Dual Enrollment
- College Tech Prep
- Advanced Placement
- International Baccalaureate
- Seniors-to-Sophomores

### POST-SECONDARY ENROLLMENT OPTION PROGRAM STUDENT

The Post-Secondary Enrollment Option Program provides high school students with an additional educational option to take college classes. The program is intended to complement the high school's college preparatory curriculum.

Your high school counselors can help you decide if this program is right for you. In addition, high school counselors are responsible for explaining the equivalency, or lack of equivalency, of a given course at Clark State in meeting high school graduation requirements.

The Admissions Office can provide you with additional information and entrance requirements.

### COLLEGE TECH PREP STUDENTS

Ohio College Tech Prep prepares students for high skill, high demand technical careers in a competitive global economy. Rigorous educational pathways emphasize math, science and technology and lead to post-secondary education. Educators, employers and communities collaborate to develop and deliver all Tech Prep pathways. The Clark State College Tech Prep Consortium has over 30 pathways, which are direct sequences of study from high school to college for programs such as Engineering, Agriculture, Health Technologies, Information Technologies and Teaching Professions, in all four counties in Clark State's service area.

### NEW STUDENT

If you are a new student who has never attended a college, you only need to take the Placement Test and meet with an advisor before you register for classes.

If you do not have a high school diploma or a GED certificate and are at least 19 years of age, you must achieve a minimum score on the Placement Test for eligibility for Title IV Funds (federal financial aid). You will be granted conditional admission to the College until you have successfully completed any required developmental courses and earned at least a 2.0 GPA in your first 24 hours of college-level coursework.

### TRANSFER STUDENT

If you are transferring from an accredited college or university, you need to submit official college transcripts for courses you want evaluated for transfer credit. Transcripts must be mailed directly from the college to the Admissions Office.

### STUDENT WITH WORK/LIFE EXPERIENCE

If you would like to earn credit for your life experiences, you may put together prior learning portfolios that are assessed by members of the Clark State faculty. To learn more about earning college credit for your past experiences, contact 937.328.3852 or visit the Arts and Sciences Division.

### INTERNATIONAL STUDENT ADMISSION

Clark State is authorized under federal law to accept non-immigrant (F-1 visa) students. Students wishing to enroll under this immigration status must apply through the Admissions Office following the instructions and guidelines on our website, [www.clarkstate.edu/international](http://www.clarkstate.edu/international). The following documents are required:



- **Clark State Application**

- **School Transcripts-High School/College**

All students are required to submit official copies of high school and college transcripts, translated in English. Faxed or unofficial copies will not be accepted.

- **Toefl Scores**

A minimum TOEFL score of 500 is required for the paper-based test and 173 for the computer-based test. A minimum score of 50 is required for each section (listening, writing and reading) for the paper-based test and a minimum of 18 for each section of the computer-based test. Your scores should be directly sent from the TOEFL Testing Center. The TOEFL number for Clark State Community College is 1127.

- **Financial Support**

Student and sponsor must complete the Financial Certification & Affidavit of Scholarship. To satisfy Visa application requirements, the student must show adequate finances to cover the expected period of study. Financial aid for international students is not available. Sponsor/student must provide current financial documentation such as bank statements, employment/salary letters, tax returns, etc. The documentation must be less than six months old, include the sponsor's name and signed by the appropriate bank or government official.

- **Acknowledgement of Responsibility**

Clark State Community College will issue an I-20 for the F-1 Student Visa only after the necessary documents have been received and evaluated. Please submit all documents together. Incomplete application packages will not be processed.

## **MATURE CITIZENS PROGRAM**

If you are over 60 years of age, you may enroll in college credit and noncredit classes on a space-available basis. Normal admission requirements as well as instructional and general fees are waived. In addition to course enrollment, you'll also have the opportunity to use the College facilities and educational services. We also encourage you to take part in student activities. If you'd like more information, call or visit the Clark State Admissions Office.

## **Admissions Process**

The Admissions Office is available to help you get started at Clark State. Located in the Sara T. Landess Technology and Learning Center, Room 120 and at the Greene Center, this office has everything you need. Complete the Clark State admissions application and submit it to the Admissions Office. An application may also be completed and submitted from our website, [www.clarkstate.edu](http://www.clarkstate.edu).

Students interested in applying to the College are encouraged to submit applications early. Completed applications are required for both full-time and part-time students. All necessary materials may be obtained by contacting the Admissions Office.

Students shall be accepted into the College after their completed application has been received by the Admissions Office. Students applying to health programs must also complete additional admissions requirements as noted on page 20. Students applying to the Realtime Reporting program must submit a high school transcript upon graduation or GED certificate.

Applicants are notified of their acceptance within 28 days of the Admissions Office receiving their application.

All admission procedures apply to both full-time and part-time students. New students are strongly advised to attend a new student orientation session that is scheduled through the Counseling Office located in Rhodes Hall. An on-line orientation is also available through the website at [www.clarkstate.edu/orientation.html](http://www.clarkstate.edu/orientation.html)

## **ENTRANCE EXAMS**

As an open admissions institution, Clark State does not require college entrance exams. However, if you are a high school student, you are encouraged to take either the ACT or SAT, especially if you will be transferring to a four-year college to complete a bachelor's degree. The following scores on these tests will exempt you from having to take initial placement tests:

- Students are excused from mathematics/algebra placement testing if they have received the following mathematics scores in the last three years: 22 ACT or 560 SAT.
- Students are excused from placement testing in reading and writing if they have received the following English scores in the last three years: 20 ACT or 500 SAT.
- Students with mathematics scores of 23 ACT or 700 SAT are eligible for mathematics proficiency tests.
- Students with English scores of 23 ACT or 670 SAT are eligible for English proficiency tests.

## **PLACEMENT TESTING**

If you're entering a degree program at the College, you are required to take placement tests in reading, writing and mathematics before you register for your first courses. (This does not include students who have college-level English and math credits to transfer from another college or university, acceptable ACT or SAT scores (taken within the past three years), or those enrolling exclusively in other non-credit courses. These tests will be used to determine the English and mathematics courses that best match your skills so you'll have the greatest chance to learn and succeed at Clark State. You may be required to enroll in our college preparatory

education (CPE) courses based on your specific program or test scores. The Advising Center staff will let you know if you need to take college preparatory courses.

Although there is no time limit, you should plan on 1 1/2 to 2 hours to complete the test. Paper, pencil and calculator will be provided. Personal calculators may be used as long as they do not have graphing or programmable functions. A study guide is available in the Admissions Office and Success Center in the Sara T. Landess Technology and Learning Center, at the Greene Center or online at [www.act.org/compass](http://www.act.org/compass).

Most often, your placement test results will remain valid for three years. Initial placement tests are free of charge. One retest is allowed at a fee of \$5. Testing is available Monday through Thursday, 8:30am-7pm and Friday, 8:30am-4pm. For further information call 937.323.6049 or visit the Clark State website at [www.clarkstate.edu](http://www.clarkstate.edu).

If you have a documented disability (either a physical or learning disability) and need special accommodations for taking the placement tests, please make arrangements in advance with the Disability/Retention Specialist by calling 937.328.6019.

## **COLLEGE TECH PREP STUDENTS**

Students who have completed high school college tech prep programs, recognized by the Clark State Tech Prep Consortium, may qualify for scholarships and/or have the opportunity to earn college credit from Clark State while still enrolled in their high school programs. For more information contact the College Tech Prep Office at Clark State or call 937.328.3888.

## **CAREER TECHNICAL CENTER GRADUATES**

High school students in the following career technical schools may have the opportunity to earn college credits from Clark State while still enrolled in their career center program: Greene County Career Center, Miami Valley Career Technical Center, Ohio Hi-Point Career Center, Springfield-Clark County JVS, Tolles Technical Center and Upper Valley JVS.

Agreements with these career technical schools may allow for one or more credit hours to be granted toward an associate degree or certificate at Clark State. For additional information about this program contact the Coordinator of Tech Prep at 937.328.3888.

## **FRESH START**

If you re-enroll after an absence of three or more consecutive years, you may petition the Records and Registration Office at any time prior to graduation to eliminate the cumulative GPA of your previous enrollment. Any courses in which you received a C or better will be counted in the "hours earned" but not in the GPA.

For more information about Fresh Start, contact the Records and Registration Office.

## **RE-ADMISSION**

If you are returning to Clark State after three years or more, you will need to update your student information in the Admissions Office and re-take the placement test before registering for classes in the Records and Registration Office.

Students who interrupt their attendance and later return must meet the curricular requirements in place at the time of their return. Technical and basic courses taken prior to any interruption may have to be re-evaluated. Those that were taken in the last five years generally will still meet graduation requirements. However, some technologies may have more stringent requirements. You should contact your division to determine the acceptability of previous courses. Courses that were taken more than five years ago will be evaluated on an individual course basis. Courses taken more than seven years ago will be evaluated for acceptability by the division dean.

If you want to re-enter a health program, you should also contact the Health and Human Services Division for additional reinstatement requirements.

Students enrolling after an absence of three or more consecutive years may wish to investigate the Fresh Start option.

## **ENGLISH PROFICIENCY**

If a student wishes to test out of English, he or she will be asked to complete a two-hour exam. This exam will include a written essay and a multiple-choice test, which has been prepared by the English faculty at Clark State.

The student should take the test before the end of midterm week of the quarter before he or she would be registered for the class. For Fall Quarter, the test should be taken in the spring. It will be graded by three English faculty members who will determine whether the student should take English I or English II based on the results of this exam. The fee for taking the exam is \$60. The student should call the Arts and Sciences Division Office at 937.328.6030 to schedule an exam time.

## **SPACE-LIMITED PROGRAMS**

Some programs offered at Clark State are restricted in the number of students who can be admitted each year. These space-limited programs are Medical Laboratory Technology, Physical Therapist Assistant, Practical Nursing, Registered Nursing and Nursing Transition (Practical Nursing to Registered Nursing). Please refer to the curriculum pages or contact the Admissions Office for further information.

## HEALTH TECHNOLOGIES ADMISSIONS

High school applicants for these programs are encouraged to apply for admission to the College in their junior or senior year. Students must fulfill the prerequisites as listed prior to petitioning to a health program.

All applicants are considered for admission in the Registered Nursing, Practical Nursing, Nursing Transition (Practical Nursing to Registered Nursing), Medical Laboratory Technology and Physical Therapist Assistant programs by the date in which they file a petition and have that petition approved.

While on the waiting list, all applicants must maintain the required cumulative grade point average for the respective program. College preparatory courses and other courses, which are not listed as part of the curriculum, are not typically included in calculating the cumulative GPA.

Transcripts are reviewed prior to sending acceptance letters for these programs and prior to the beginning of the technical courses. Practical Nursing, Registered Nursing, Nursing Transition (Practical Nursing to Registered Nursing), Physical Therapist Assistant and Medical Laboratory Technology applicants must have the required grade point average in order to be eligible for acceptance into the program.

Applicants who have not maintained the required cumulative grade point average in the required courses when their names are reviewed for acceptance will be required to re-petition for the program.

## EMERGENCY MEDICAL SERVICES (EMS)

Students must complete a request to enter the EMS program. Forms are available in the Admissions Office, Health and Human Services Division Office and online at [www.clarkstate.edu/petition](http://www.clarkstate.edu/petition). All incoming EMS students must also meet the entrance requirements described in the program information pages.

## PHYSICAL THERAPIST ASSISTANT

### Students must:

- Successfully complete the reading, writing and math placement tests or equivalency. Refer to PTA program information pages or Petitioning Handbook for information.
- Complete the chemistry and physics pre-requisites. Refer to the PTA program information pages and PTA Program Petitioning Handbook
- Complete 30 hours of observation. Refer to the PTA program information pages and PTA Program Petitioning Handbook.

Students must obtain the PTA Program Petitioning Handbook from the Admissions Office, Health and Human Services Division Office or online at [www.clarkstate.edu/petition](http://www.clarkstate.edu/petition) and complete a petition to enter the PTA program. Petitions are accepted in the Health and Human Services office (ASC 133) throughout the year.

Students are entered into the program once a year in fall quarter. Admission and waiting list notifications are made initially in April of each year.

## MEDICAL LABORATORY TECHNOLOGY

Students must successfully complete reading, math and algebra placement tests, or obtain a grade of C or better in the appropriate college preparatory or college-level course prior to petitioning for the program.

After the petitioning requirements have been completed, students must petition for the program online at [www.clarkstate.edu/petition](http://www.clarkstate.edu/petition).

Students are entered into the program twice a year in fall and winter quarter based on the date of their approved petition request. Space limitations do not apply to distance students who complete lab sessions at out-of-area off-campus sites.

## PRACTICAL NURSING

Students must successfully complete the reading, writing and math placement tests or equivalency prior to petitioning to the program. Refer to program information for equivalencies.

After the petitioning requirements have been completed, students must petition for the program online at [www.clarkstate.edu/petition](http://www.clarkstate.edu/petition). If all requirements are complete, the student's name will be placed on the waiting list.

Students must successfully complete MST 181 or equivalent nurse aide training course and furnish verification of nurse aide competency at the time of enrollment in the technical courses (**MST 181 is not a requirement for the waiting list**).

## REGISTERED NURSING/EVENING REGISTERED NURSING/NURSING TRANSITION (PRACTICAL NURSING TO REGISTERED NURSING)

Students must successfully complete the following prior to petitioning to the program.

- Reading, writing and math placement tests or equivalency. Refer to nursing program information for equivalencies.
- One unit of high school chemistry or CHM 115, CHM 114 or the equivalent with a grade of C or better within the previous five years.

After the petitioning requirements have been completed, students must petition for the program online at [www.clarkstate.edu/petition](http://www.clarkstate.edu/petition). If all requirements are complete, the student's name will be placed on the waiting list.

Students must successfully complete MST 181 or equivalent nurse aide training course and furnish verification of nurse

aide competency at the time of enrollment in the technical courses. **MST 181 is not a requirement for the waiting list; MST 181 is not required for the Nursing Transition (Practical Nursing to Registered Nursing) program.**

## **REINSTATEMENT FOR HEALTH AND HUMAN SERVICES PROGRAMS**

If a student withdraws from, or does not continue in the technical courses in a space-limited program and wishes to re-enter, the student should contact his/her academic advisor in the Health and Human Services Division for a copy of the program-specific Reinstatement Policy.

Students who wish to re-enter are required to have at least a 2.0 cumulative grade point average in courses required for the program before the reinstatement request will be considered. Transcripts are reviewed on an individual basis prior to accepting students for reinstatement. Certain courses may need to be repeated. If reinstatement criteria are met, eligible students are reinstated on a space-available basis to the quarter for which they are requesting reinstatement. Reinstatement is not guaranteed.

## **Orientation**

New Student Orientation is offered during registration periods; students are encouraged to attend orientation prior to registering for classes. During an orientation session a student will complete many necessary steps including placement testing, scheduling, registering, and completing financial aid. In addition students will become familiar with tutoring, the library, bookstore services, and student activities. An online orientation is also available at [www.clarkstate.edu/orientation](http://www.clarkstate.edu/orientation). To learn more about available orientation dates and times, contact 937.328.6084.

## **Academic Advising**

The mission of the Academic Advising Center is to help students strive for success by engaging critical thinking skills in the clarification of academic goals.

New students are expected to begin their academic program by discussing goals with an Academic Advisor in the Advising/Welcome Center. If you have declared a major and you are a first quarter student, please contact the Advising Center for placement test score interpretation and first quarter scheduling assistance. If you are undecided about an academic major, you should contact Career Management for guidance.

Clark State Academic Advisors are available to assist students with the initial planning and pursuit of an academic degree. Advisors can help students by answering questions about how to obtain the necessary information to complete a program of study. It is recommended that students develop

both short- and long-term plans and discuss those with their advisor. Your advisor's role is to discuss options and offer advice regarding your academic program of interest.

After completing the application process and either taking the COMPASS Placement Test, or after transcripts from previous institutions have been received and reviewed, Academic Advisors can provide guidance with first quarter scheduling. Students with transfer credit from another college should have official transcripts sent to the college, and should also have an unofficial copy in hand when they meet with an Academic Advisor. It is recommended that students create a permanent folder to take to each advising session.

Prior to registering for first quarter classes, Academic Advisors will review the specific requirements for completion of the student's academic program. However, these can also be found online at [www.clarkstate.edu/academics](http://www.clarkstate.edu/academics). During the first appointment, students are assigned to a Faculty Advisor for all future advising and scheduling assistance. Faculty advisors are specific to each student's field of interest and are knowledgeable about professional goals related to their departments.

The first opportunity for class registration is termed Priority Registration. This period provides current students with first choice of classes. It is highly recommended that current students take advantage of this opportunity and work with their Faculty Advisors to make appropriate course selections. Advisor sign-up sheets are posted the week prior to Priority Registration at the Division office (Arts & Sciences), or on each advisor's door (Health & Human Services or Business & Applied Technologies).

Beyond the first quarter, all students should contact their Faculty Advisor to schedule an appointment the week before Priority Registration. If you do not know the name of your Faculty Advisor, you may contact the appropriate division office (Arts & Sciences, Business & Applied Technologies, or Health & Human Services), or find it online at [www.clarkstate.edu/counseling\\_fac](http://www.clarkstate.edu/counseling_fac).

## **RESPONSIBILITIES IN ADVISING**

Students increase their likelihood of success when they actively participate in the advising process. Although your advisor may make suggestions or discuss options concerning courses in your program, he or she will not make decisions for you. To this point, both the student and advisor have specific responsibilities.

### **Student Responsibilities**

- Initiate and maintain contact with advisor during the first quarter; then transition to Faculty Advisor
- Utilize online services such as WebAdvisor and Student Webmail
- Follow through on advisor recommendations and adhere to important dates

- Learn and complete requirements of academic program
- Make use of appropriate resources on campus
- Avoid taking a heavy course load while working more than half time and/or being involved with other significant responsibilities

### Advisor Responsibilities

- Understand requirements for all Clark State degrees, certificates, and programs and advise new students accordingly
- Serve first quarter students; continuing students may take care of their own registration using WebAdvisor and/or their faculty advisor
- Collaborate with campus-wide resources for student success
- Assist students in understanding college policies and procedures
- Communicate important dates
- Facilitate the ease of transfer

## Registration Information

New students should contact the Admissions Office at 937.328.6028 or the Greene Center at 937.429.8819 to make an appointment for registration. You should also attend orientation, an information session, where you will have the opportunity to learn (and ask questions) about Clark State.

If you are a returning student, you should contact your program's divisional office for academic advising and registration assistance.

Priority registration is for students who are currently enrolled at the College. This system gives you registration priority based on the number of credit hours you have earned. Open registration is for new and returning students.

Information about how and when to register for classes is found in the most current issue of the class schedule. Schedules are available in the Records and Registration Office, on our web site and at other campus locations approximately two weeks before priority registration for a new quarter begins.

There are four ways to register:

- **Fax** your schedule request to 937.328.6097
- **Mail** your schedule request to the Records and Registration office
- **Web** registration
- **In person** at the Records and Registration office, Rhodes Hall, Room 220, the Business and Applied Technologies office, Brinkman Educational Center, Room 201, or at the Greene Center.

### CREDIT HOUR LIMIT

You may enroll for a maximum of 20 credit hours per quarter during the regular academic year. You must have the approval of your division dean to enroll in more than 20 credit hours.

### ADDING COURSES

You can add courses through the fifth class day in Fall, Winter or Spring Quarters and through the second day of any Summer term. The Drop/Add card can be obtained from faculty advisors, division offices, Academic Advising Center, Records and Registration Office, the Greene Center and online.

### DROPPING COURSES

If for any reason you cannot complete a course, you must officially withdraw from the class. Even if you never attend class, if you officially enrolled in a course, you will receive a grade for the course unless you complete and submit a drop form in accordance with College policy.

Grades will be reflected on transcripts as follows for a regular ten-week term:

- If the course is dropped prior to the 15th day of the term, the work attempted will not be counted and no notation of the enrollment will appear on the transcript.
- If the course is dropped from the 15th day of the term through the published date indicating completion of the seventh week of the term, the grade of W will appear on the transcript.
- If the course is dropped after the published date indicating completion of the seventh week of the term, the earned grade will be recorded unless the student contacts the instructor and the instructor approves and submits a grade of W.

For the last date to withdraw from a ten-week term course and receive a grade of W, check the quarterly schedule. For the last date to withdraw from courses that run for less than a full quarter, please contact the Records and Registration Office. Drop/Add forms are available from division offices, the Counseling and Advising offices and from Records and Registration. You can also drop courses online. Rules regarding assignment of grades still apply.

If you decide to withdraw from a class and have any form of financial aid, you should consult with the financial aid office prior to the withdrawal to determine what effect it will have on your financial aid status. If you receive Veterans' benefits and drop a class or withdraw from all classes, it is your responsibility to notify the Academic Advisor, Sara T. Landess Technology and Learning Center, Room 120, 937.328.8071. Courses dropped anytime during the quarter could result in an overpayment dating back to the first day of the quarter.

## REPEATING COURSES

You may repeat any course at the College one time without having to request permission. Permission to take developmental courses a third or more times must be obtained from a review panel convened by the Dean of Arts & Sciences. If you are enrolled in a health sciences program, you must also abide by the program-specific published regulations about re-enrolling in courses.

If you receive a grade of D or F in a general education elective not specifically required for graduation, you may substitute a different general education course for inclusion in your cumulative grade point average.

A course that is re-taken will count only once toward graduation requirements and in the cumulative grade point average. Both the original grade and the new grade will appear on the transcript. However, only the higher grade counts towards your GPA.

## AUDITING A COURSE

If you audit a course, you will not receive a grade or credit. You will be permitted to attend classes but you won't be required to take exams. The fee for auditing is the same as for credit. Audit status is not convertible to credit status nor is credit status convertible to audit status once the registration has been completed. Students using Veterans' benefits or receiving financial aid may not audit classes.

## CHANGE OF MAJOR

Students who decide to change majors must complete a Change of Major form available in the Records and Registration Office and at the Greene Center. You will need to meet placement testing requirements for your new major.

## SOCHE CROSS-REGISTRATION PROGRAM

If you are a regularly enrolled student at Clark State or any other Southwestern Ohio Council for Higher Education (SOCHE) institution, you may be eligible to register to take classes offered by another SOCHE institution at no additional charge on a space-available basis. Information on the eligibility requirements, registration procedures and the Cross Registration Application form is available in the Records and Registration Office and on the web at [www.soche.org/crossreg.htm](http://www.soche.org/crossreg.htm). A list of the colleges and universities participating in the SOCHE cross registration program is available in the Records and Registration Office and on the SOCHE website at <http://www.soche.org/colleges.htm>.

## CREDIT/NO-CREDIT ENROLLMENT

You may petition the Records and Registration Office for permission to take one course each quarter on a credit/no-credit (CR/NC) basis. There are a maximum total of six courses. Two of these courses may be selected from general education offerings; two courses that are basic to a major; and two from the technical courses.

You can make your choice at the time of registration. Once the quarter has begun, you cannot change back to the standard grading system. Your instructor will not know of your decision. At the end of the quarter, your grade of C or better is converted to CR and a grade of D or lower is converted to NC. Grades of CR or NC are not included when computing your grade point average.

## Appeals For Transfer Credit

A student disagreeing with the application of transfer credit by Clark State Community College shall be informed of the right to appeal the decision and of the process for filing the appeal. The Records and Registration Office shall make available to students the appeal process for Clark State Community College.

- The student must complete the Transfer Appeal form (located in the Records/Registration Office – Rhodes Hall Rm. 222 or at the Greene Center)
  - The appeal form is forwarded by the Records/Registration Office to the appropriate academic dean. The appropriate academic dean evaluates or re-evaluates the course(s) and returns the decision to the Records and Registration Office.
  - The Records/Registration Office contacts the student informing them of the decision.
- If the student is not satisfied with the decision, he/she may appeal to the Vice President of Academic and Student Affairs. The Vice President of Academic and Student Affairs has the final decision for all academic matters.
- If the student is not satisfied with the decision made by the Vice President for Academic and Student Affairs, he/she may appeal to the state-level Articulation and Transfer Appeals Review Committee.

If a transfer student's appeal is denied by Clark State Community College after all levels within Clark State Community College have been exhausted, the College shall advise the student in writing of the availability and process of appeal to the state-level Articulation and Transfer Appeals Review Committee.

The state-level Articulation and Transfer Appeals Review Committee shall review and recommend to Clark State Community College the resolution of individual cases of appeal from transfer students who have exhausted all local appeal mechanisms concerning applicability of transfer credits at receiving institutions.

# Paying for College

## HOW MUCH DOES CLARK STATE COST?

	Ohio Resident	Non-Resident
<b>Instructional fee</b> (up to 16 credit hours)	\$65.50	\$131.00
<b>General fee</b> (up to 14 credit hours)	\$ 6.00	\$ 6.00
<b>Technology fee</b> (up to 16 credit hours)	\$ 6.00	\$ 6.00
<b>Total Cost</b>	\$77.50	\$143.00

### Other Fees and Expenses

Application fee (one time only)	\$15
Late payment fee (per quarter)	\$15
Late registration fee (per quarter)	\$25
Transcript fee	\$2
Auxiliary services fee (per quarter)	\$5
Delayed Payment Plan (DPP) service charge	\$15
DPP late payment fee (per installment)	\$15
Proficiency fee per credit hour (minimum charge of \$20)	\$15
Prior Learning Portfolio Assessment (per course)	\$75
Prior Learning Portfolio(written as part of a class)	\$60
Lab fee (for certain courses only)	Varies
Certification fee (for certain courses only)	Varies
Liability insurance (for certain courses only)	Varies
COMPASS Retest Fee (maximum of one retake per subject area)	\$5
Corporate Proficiency (per credit hour)	\$5

Instructional fees are charged on the first 16 credit hours registered in any one academic quarter. General fees are used to support the Student Senate, student activities and all other student services of the College including Financial Aid, Records, Counseling, Health Clinic, Campus Ministry and Career Management.

Auxiliary services fees are used to support the operation and maintenance of parking lots and roadways, the Campus Safety and Security Department and other safety and security activities on all campuses.

Since access for students to state-of-the-art technology is critical to the learning experience, there is a \$6 per credit hour technology fee, up to a maximum of 16 credit hours. Revenue generated by this fee is used to directly benefit students.

All of our fees and expenses are established by the Clark State Community College Board of Trustees and are subject to change without notice. Your quarterly fees and expenses are due and payable prior to the beginning of the quarter in which you are enrolled. Although we make every effort to

maintain tuition and fees at the lowest possible level, some of our students may find the cost of a college education to be too great without some form of assistance. The College and the Clark State Foundation provide a variety of federal, state and institutional financial assistance programs to help. Please refer to the Financial Aid section in this catalog for more information.

### PAYMENT

Payment for tuition may be made by cash, check, MasterCard, Discover or VISA. Those students who have not met their financial obligations will not be permitted to attend classes.

In addition, you may not be permitted to graduate, receive an official transcript or register for subsequent quarters until all your financial obligations to the College are satisfied.

To help ease the burden of paying tuition costs, Clark State offers a Delayed Payment Plan (DPP). This plan allows you to make payments of one-third of your bill at each of the three published deadlines. If you register after the fee payment deadline, you must pay the initial installment when you register. Contracts and additional information are available in the Cashier's Office in Rhodes Hall and at the Greene Center.

### CASH REFUND POLICY

Refunds of instructional, general, laboratory and technology fees will be made according to the following schedule. All drops or withdrawals must be in writing and are effective on the date received by the Records and Registration Office. Refunds are not issued for late fees, auxiliary services fees or Delayed Payment Plan service charges. For certain programs, liability insurance is required to be purchased. For these programs a lab fee is assessed for this coverage. The coverage will remain in effect until the expiration of your insurance contract.

If you need more information, please contact the Financial Aid Office or the Cashier's Office.

#### Fee Refund Schedule for Fall, Winter and Spring Qtrs.

Date	Refund
By the 7th calendar day of the quarter	100%
By the 14th calendar day of the quarter	75%
By the 21st calendar day of the quarter	50%
After the 21st calendar day of the quarter	None

#### Fee Refund Schedule for Summer Qtr.

Date	Refund
The 1st day of class	100%
By the 4th calendar day after the first day of class	75%
By the 9th calendar day after the first day of class	50%
After the 9th calendar day after the first day of class	None

## PARKING

Fines are assessed for vehicles not displaying a current parking permit or for violating motor vehicle regulations. Permits are free of charge and can be picked up in the Bookstore or the lobby of the Brinkman Educational Center. You will need to know your license plate number. Fines are payable at the Cashier's Office.

### Violations and fines include:

Parked in handicapped zone	\$50
Parked in fire lane	\$50
Moving violations	\$25
Parking on grass, sidewalk, loading zone or other restricted area	\$25
Student in faculty/staff lot	\$20
Improper parking	\$20
No valid permit	\$10
Parking in visitor lot	\$10

The Clark State Parking Guide is available for viewing on the College web page. Access the Campus Security section under Student Services.

## OHIO RESIDENCY

Clark State follows the Ohio Board of Regents Rule 3333-1-10 for determining a student's residency status for subsidy and tuition surcharge purposes. Copies of this rule and the Request to Change Residency Status Petitions are available from the Records and Registration Office. Specific exceptions and circumstances may require a review of each student's residency classification on an individual basis.

A petition for reclassification of residency must be submitted and approved prior to the first day of classes for the quarter if the reclassification is to be effective.

## Financial Aid

Financial aid is available from many sources to help students who, without such aid, would be unable to attend college. Although students and their families are primarily responsible for the cost of education, financial aid can fill in the gap if their family can afford only part of the cost.

### HOW TO APPLY

Financial aid applications are available in January for the upcoming financial aid year that begins with Summer Quarter. You should file these applications as soon as your tax information is available.

Clark State uses the Free Application for Federal Student Aid (FAFSA). FAFSAs are available in the Financial Aid Office or on the web. You should complete this form using prior year income. The information provided on this form is processed and a Student Aid Report (SAR) is sent to your e-mail account if completed online, or mailed to your home if you submitted a paper FAFSA. This information is also sent

to the schools you listed on your FAFSA. The SAR is used to establish your financial need. With a few exceptions, all financial aid awarded is based on demonstrated financial need. By filing the FAFSA, you will be considered for all aid for which you might be eligible. The Financial Aid Office determines eligibility and notifies students with an award notification via the financial aid web page detailing aid that is being offered. Applications for additional aid, such as Federal Work-Study, will be considered as long as funds are available. We encourage you to apply early.

Materials completed by the deadlines below will be processed by the beginning of the quarter, providing the student meets all eligibility requirements and has submitted all requested documents.

### PRIORITY DEADLINES

Summer	<b>March 15</b>
Fall	<b>June 15</b>
Winter	<b>October 15</b>
Spring	<b>December 15</b>

Generally, Pell Grants may be used for a maximum of three quarters during the academic year beginning with Summer Quarter and ending with Spring Quarter. Students who want to be considered for an additional quarter must contact the Financial Aid Office to verify further eligibility beyond three quarters. If you do not provide the requested documentation needed to complete the verification process, you may lose funds.

The Financial Aid Office begins processing financial aid applications and loan applications for the next academic year in the spring for those students whose applications are complete and ready to be processed.

All loan applicants are required to file the FAFSA, which indicates eligibility or non-eligibility with the Financial Aid Office.

Clark State can provide you with additional information about scholarships and deadline dates. Please call the Financial Aid Office at 937.328.6034.

### SUPPORTING MATERIAL

Additional documentation may be needed for certain situations or to comply with U.S. Department of Education verification requirements. The Financial Aid Office will advise you on what you need.

#### Eligibility Requirements

Listed below are the eligibility requirements for the federal programs.

- Generally, you must show financial need.
- You need to have a high school diploma, GED or have passed an independently administered test approved by the U.S. Department of Education.



- You are enrolled as a regular student in an eligible program.
- You need to be a U.S. citizen or eligible non-citizen.
- You will need to make satisfactory academic progress.

### **DENIAL OF AID**

Aid may be denied for several reasons: no need or insufficient demonstrated financial need, lack of institutional funds, failure to make satisfactory progress toward completion of the certificate or degree, default on a federal student loan or failure to submit required documentation.

### **FINANCIAL AID VOUCHERS**

When aid has been awarded, it becomes a voucher similar to a credit card that can be used on campus for the payment of tuition, fees and books. A check for any surplus aid not used is mailed to the student's home address the fifth week of the quarter by the Business Office. Students who totally withdraw may not receive any surplus funds.

### **FEDERAL PELL GRANT**

The Pell Grant is a federal assistance program designed to provide the foundation on which other aid can be built. As in any grant, it is a form of gift aid, which does not have to be repaid. The amount of the award depends on the Expected Family Contribution (EFC) on the Student Aid Report and the number of credit hours for which a student enrolls. A student who has already earned a bachelor's degree is not eligible for this grant. During 2007-08 the annual value of Pell Grants at Clark State ranged from \$400 to \$4,310 for part-time and full-time students, respectively.

### **ACADEMIC COMPETITIVENESS GRANT (ACG)**

The ACG grant is another federal grant that can provide up to \$750 for a first year student and up to \$1,300 for a second year student. Students must be Pell eligible, enrolled in a two-year degree program, be full-time and must have completed a rigorous high school schedule consisting of four years of English, three years of Math, three years of Science, three years of Social Studies and one year of a foreign language. Students must submit a high school transcript or Ohio honors diploma to be considered. To be eligible for the second year of funding, students must obtain a cumulative GPA of 3.00 by the end of their first year.

### **FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)**

This is a federal grant which provides assistance to eligible undergraduate students who have not earned a bachelor's degree. The maximum award by law is \$4,000 per year; however, the amount of any individual award may be much less because of restricted funding. FSEOG awards must be targeted to exceptionally needy students with priority given to Pell Grant recipients.

### **FEDERAL SUBSIDIZED STAFFORD LOAN PROGRAM**

This program offers long-term interest-bearing loans made available to students by lending institutions (banks, savings and loan associations and credit unions) to help pay for educational expenses. Repayment is made beginning six months after the borrower ceases to be at least a half-time student (enrolled in six credit hours). This program is open to all dependent and independent undergraduate students based on financial need.

Loan proceeds are usually sent to the College in multiple disbursements. First-year, first-time borrowers cannot receive the first loan payment until 30 days after the first day of the loan period. Arrangements must be made by the student to take care of tuition costs until loan proceeds are issued.

### **FEDERAL UNSUBSIDIZED STAFFORD LOAN PROGRAM**

This loan program is available to dependent or independent undergraduate students regardless of family income. The term unsubsidized means that interest accumulates (i.e., is not paid by the federal government) while the student is enrolled. The application process is the same as for the Federal Subsidized Stafford Loan Program.

Loan proceeds are sent to the College in the same manner as the subsidized loan program and the 30-day wait for new borrowers also applies.

### **PARENTS' LOANS FOR UNDERGRADUATE STUDENTS (PLUS)**

PLUS Loans for dependent students are not need-based and are made regardless of income pending credit approval. They are used to supplement needs not completely met by the Stafford Loan programs. The interest rate of the loan is variable and is set by Congress. There is no deferment option or grace period for the PLUS program.

The application process for the federal PLUS program is the same as for the Stafford Loan programs and does not carry a fixed loan limit, but is limited to the cost of attendance.

### **OHIO INSTRUCTIONAL GRANT (OIG)**

This grant is funded by the Ohio Board of Regents and is awarded to eligible residents of Ohio who show financial need and are enrolled full-time in a degree-granting program. The application process is accomplished through the application for the Pell Grant program (FAFSA).

### **OHIO COLLEGE OPPORTUNITY GRANT (OCOG)**

This is a grant funded by the Ohio Board of Regents and is similar to the OIG Grant, but is for students that were considered freshman beginning with the 2006-07 award year. Students may be full-time or part-time and awards are adjusted based on actual enrollment status. The application process remains the same.

## FOUNDATION LOAN

The Foundation Short-Term Loan is an emergency loan program for the payment of tuition, fees and books. This loan cannot exceed \$1,500 per quarter and must be repaid by the eighth week of the quarter. There is a \$20 processing fee. The borrower must demonstrate the ability to repay the loan. Receipt of this loan is contingent upon availability of funds.

## MUMMA LOAN

The Dorothy M. Mumma Short-Term Loan is an emergency loan program for the payment of tuition, fees and books. This loan cannot exceed \$1,500 per quarter and must be repaid by the eighth week of the quarter. There is a \$20 processing fee. The borrower must demonstrate the ability to repay the loan. Receipt of this loan is contingent upon availability of funds.

## ACADEMIC PROGRESS

As a Clark State student, you are expected to meet standards of academic progress while working toward a degree, certificate or transfer credits. The Financial Aid Office is required by the U.S. Congress and the U.S. Department of Education to enforce standards of academic progress for students who receive Federal Pell Grant, Federal ACG grant, Federal SEOG, Federal work-study and Federal Family Educational Loans. This policy is applied to all financial aid applicants, regardless of whether they received financial aid previously.

## CREDIT HOUR REQUIREMENTS

You will need to successfully complete 67 percent of all hours attempted, both quarterly and cumulatively, with an A, B, C, D, IP, or S. You must also maintain an appropriate grade point average as determined by the College to retain eligibility for federal aid.

Total Credit Hours Attempted	GPA Required
1-15	Above 1.49
16-30	Above 1.59
31-45	Above 1.69
46-60	Above 1.79
over 60	Above 1.99

You must complete your program of study within 150% of the program length. Clark State credits and any transfer credits accepted by Clark State are included in the 150% timeframe maximums, also including withdrawals and non-completions. If a student changes majors within the same degree or certificate, they are still required to complete within the same maximum timeframe.

## CREDIT HOUR PROBATION

If a student fails to complete 67% of their attempted hours and/or falls below the minimum GPA requirement, they are placed on financial aid probation. Aid is applied for one quarter only and is re-evaluated before the next term.

Students must successfully complete 67% of attempted hours and meet GPA requirements during their probation quarter and until an overall 67% rate is achieved. Students who fail to meet the requirements will be suspended from federal financial aid.

## GRADE POINT PROBATION

You must maintain the minimum quarterly GPA until your overall GPA reaches the minimum. The student will be awarded federal financial aid on a quarterly basis only, maintaining probation status. All students must have attained a 2.0 GPA by the end of the second year of their program.

## FINANCIAL AID SUSPENSION

If the probationary status is not removed in the above-specified manner, federal financial aid will be suspended. In order to receive further federal aid, you must successfully complete 24 credit hours. The Appeals Committee will then review your transcript. You can still receive non-federal assistance. If financial aid is suspended a second time, there is no appeal.

## FINANCIAL AID APPEALS PROCESS

If you lose your eligibility and feel there are mitigating circumstances, you may appeal in writing to the Financial Aid Appeals Committee. If the appeal is granted, you will be placed on probationary status until you reach an overall 67 percent successful completion rate. The decision of the Appeals Committee is final.

## NEW PROGRAMS OF STUDY

Students who are seeking a second degree must contact the Financial Aid Office to determine new eligibility. Only one new degree will be considered.

## WORK-STUDY PROGRAM

The Federal Work-Study program provides part-time campus employment if you have financial need and want to earn part of your education expenses. You must be enrolled for at least six credit hours each quarter to be eligible to participate. During the Summer Quarter, you must be enrolled for at least six credit hours. Currently, the wage rate is \$7.00 per hour, but is subject to change with changes in the federal minimum wage. You may work up to 18 hours per week. The amount you may earn in a school year is determined by the amount of your financial need, other financial aid and availability of federal funds.

The College-Funded Work-Study Program provides part-time campus employment even if you do not show financial need (as you would for the Federal Work-Study Program). The wage rate and hours worked are the same as for the federal program.

The Office of Career Management assists students with locating part-time employment on campus.

## **WITHDRAWALS**

Your financial aid is based on the number of credit hours for which you are officially registered. You must notify the Financial Aid Office of any changes in enrollment.

If you add or drop credit hours, your financial aid will be automatically recalculated based on your level of enrollment. This recalculation will continue throughout the refund period.

## **FINANCIAL AID REFUND POLICY**

Any student receiving Federal Title IV funds will be subject to the following policy regarding the return of Federal Title IV funds:

Students who withdraw from all classes prior to completing more than 60 percent of an enrollment term (quarter) will have their eligibility for federal aid recalculated based on the percentage of the term completed, which shall be calculated as follows:

The percentage of the quarter completed is the percentage of aid earned. This is calculated by the number of days the student attended divided by the number of calendar days in the payment period (i.e. quarter). For example, if a student completely withdrew on the 20th day of a quarter that is 114 days in length, the student would have only earned 17.5 % of the aid he or she received ( $20 \text{ divided by } 114 = 0.175$ ).

Clark State Community College and the student will be required to return to the federal aid programs the amount of aid received that was in excess of the aid "earned" for the period the student remained enrolled.

If the College returns funds to the Title IV aid programs, it could result in the student owing Clark State Community College charges that were originally paid at the time of disbursement. Students may also be required to return funds released to them for personal expenses. Unearned federal aid will be returned in the following order: Federal Stafford Loans (unsubsidized, then subsidized), Federal Plus Loans, Federal Pell Grant and Federal SEOG.

Students who remain enrolled through at least 60 percent of the payment period (quarter) are considered to have earned 100 percent of the aid received and will not owe a repayment of Federal Title IV grant funds.

\*Please note that students are responsible for any balance owed to Clark State Community College as a result of the repayment of federal aid funds. For more information on the financial aid refund policy, please contact the Financial Aid Office.

## **EDUCATIONAL COSTS**

Expense budgets include both direct (on-campus) and indirect (off-campus) educational costs. Direct costs are

tuition and fees. Indirect costs may include estimates for books, transportation, room and board and miscellaneous and personal expenses. These expenses will vary from student to student depending on a number of factors such as marital status, dependency status (as defined by federal and state programs), residency and number of dependents. The total of all aid cannot exceed the student's cost of attendance.

## **Scholarships**

Clark State offers a variety of scholarship opportunities. Applications are available in the Financial Aid Office.

### **TRUSTEE HONOR SCHOLARSHIP**

Fifteen full tuition packages are available to academically talented students from high schools and vocational schools within Ohio. Recipients must be graduating during the current year, rank either in the upper 15 percent of their high school graduating class or have a 3.5-4.0 GPA and have demonstrated involvement in activities outside the classroom. Recipients may retain eligibility for a second year by achieving stated academic requirements. Applications may be obtained from high school counselors or the Admissions Office. Application deadline is the last Friday in March of the student's senior year of high school

### **CLARK STATE FOUNDATION**

The Clark State Community College Foundation is a non-profit organization that provides support to the College and its students. The Foundation offers and administers scholarships funded by contributions from individuals, businesses and organizations. Please pick up an application in the Financial Aid Office, the Admissions Office, the Foundation Office, or from the Brinkman Educational Center receptionist. Deadlines for applying are stated on the application. Your application will then be reviewed by the Scholarship Review Committee.

### **OTHER SCHOLARSHIPS AVAILABLE AT CLARK STATE**

You may also want to apply for these scholarships, which are funded by the State of Ohio:

### **GEORGE MUELLER COLLEGE TECH PREP SCHOLARSHIP**

Students who have completed the high school portion of a Tech Prep program located in the Clark State Tech Prep Consortium may apply for the George Mueller Scholarships. Students must apply no later than the Winter Quarter following high school graduation, have a 95% attendance rate, earn a 2.5 GPA during their junior and senior year in high school and continue in their Tech Prep Pathway at Clark State. Contact the Clark State College Tech Prep Office in the Brinkman Educational Center for additional information.

## **OHIO ACADEMIC SCHOLARSHIP**

The Ohio Board of Regents awards a \$1,000 a year scholarship to recent high school graduates based on their high school grades and ACT scores. At least one scholarship is awarded through each high school. Application is made through the high school counselor.

## **OHIO NATIONAL GUARD SCHOLARSHIP**

The Ohio National Guard will pay 100% of instructional and general fees of its members approved for education. Application is made through the local Guard unit.

## **OHIO TUITION WAIVERS**

The State of Ohio grants tuition waivers for the children of Ohio peace officers and fire fighters killed in the line of duty. Applications are processed through the Financial Aid Office.

## **OHIO WAR ORPHANS SCHOLARSHIP**

The State of Ohio awards scholarships for the payment of full-time instructional and general fees to dependent children of deceased or disabled Ohio War Veterans. Application is made through the Ohio Board of Regents.

# **Student Records**

Our Records and Registration Office processes your student records, transcripts, identification cards and diplomas. It also processes changes in student status such as name, address, residency and major. For more information, please contact the Records and Registration Office.

## **TRANSCRIPTS**

You may get an official transcript of your academic record by completing a transcript request form in the Records and Registration Office or by visiting the Clark State website and downloading the form. You may also mail or fax a written request to the Records and Registration Office. A transcript request form is available at [www.clarkstate.edu/pdf/transcript.pdf](http://www.clarkstate.edu/pdf/transcript.pdf). When requesting a transcript, include your name, Social Security number, birth date, the term you last attended Clark State, legal signature and payment. If faxing, a credit card number and expiration date is required. The fax number is 937.328.6097. All copies are \$2 each. Normally, transcripts will be sent within three to five working days of the request date.

All financial obligations to the College (all fees and fines) must be paid and all college equipment returned before a transcript can be released.

## **ACCESS TO EDUCATIONAL RECORDS**

The Family Educational Rights and Privacy Act (FERPA) affords you certain rights with respect to your education records. You have the right to inspect and review your education

records within 45 days of the day the College receives a request for access. You should submit to the Registrar written requests that identify the records(s) you wish to inspect.

You may request the amendment of your education records if you believe it is inaccurate or misleading. You should write the College officially responsible for the record, clearly identify the part of the record you want changed and specify why it is inaccurate or misleading. If the problem is not resolved to your satisfaction, you may take the matter to the Dean of Student Affairs and (in absence of resolution satisfactory to you) to a formal hearing in accordance with the College's established grievance procedures.

You have the right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests.

You also have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5920.

## **RELEASE OF INFORMATION**

The Buckley Amendment to the Family Educational Rights and Privacy Act of 1974 is designed to protect your privacy and your educational records. Clark State recognizes "Directory Information" as the following: student name, address, telephone number, major, degrees and awards received participating in officially recognized activities and sports, weight and height of members of athletic teams, dates of enrollment, enrollment status and most recent previous educational agency or institution attended.

You may request that your "Directory Information" not be released by signing a request to withhold information, available in the Records and Registration Office. The College will not release information to the newspaper concerning academic achievement if you have submitted a request.

## Tools for Student Success

The following sections are intended to be an overview of academic services at Clark State. For more detailed information, contact the Dean of Student Affairs or Dean of Library and Educational Resources.

### THE COLLEGE LIBRARY

The Clark State Library, located in the Sara T. Landess Technology and Learning Center, provides a variety of materials and services to students, faculty, staff and the community. The Library owns more than 35,000 books, 180 periodicals with electronic access to thousands more and over 2,000 audio-visual titles. The library houses computers with access to the Internet and electronic databases through OhioLINK. Numerous handouts are available at the reference desk, as well as extensive information on getting started with research on the library's web page at: <http://lib2.clarkstate.edu/library/library.html>.

A validated Clark State student identification card serves as your library card and entitles you to full borrowing privileges in accordance with the Library circulation policies. A copy of these policies is available at the circulation desk and online.

The Clark State Library is a member of OhioLINK, the statewide network of automated library services that provides access to a central library catalog listing over 46 million items along with over 100 electronic databases and 12,000 electronic journals.

Interlibrary Loan service is available to students, faculty and staff for locating and borrowing materials not owned by the College Library or available through OhioLINK. You may borrow books from any OhioLINK library with a validated Clark State ID card. *Note: Requests for diplomas, transcripts and registration for subsequent quarters may be rejected due to Library obligations.*

The Library is open Monday through Thursday, 8 am-9 pm, Friday, 8am - 5 pm and Saturday, 10am-3pm Summer hours vary. Between academic quarters, hours are Monday through Friday, 8am - 5pm The Library is closed when the College is closed. Please call 937.328.6022 for more information.

### COUNSELING SERVICES

An experienced professional counselor offers an array of programs and services to help you achieve personal growth and academic success. Personal counseling, career/life planning, consultation and special workshops and programs are available free of charge. Counseling services are confidential. For more information, please stop by the Counseling Office, Rhodes Hall, Room 224, call 937.328.6024 or visit the Clark State website.

### TUTORING

You are entitled to free tutoring as a Clark State student. If you are interested in obtaining a tutor or becoming one, please contact the tutoring assistant in the Sara T. Landess Technology and Learning Center, Room 117 or in the Brinkman Educational Center, Room 106. The assistant assigns tutors and assists in arranging contact hours - usually two hours per week per subject. Online tutoring is now available through the Clark State website.

### DISABILITY SERVICES

Clark State Community College is committed to helping students with physical and learning disabilities. Students are strongly encouraged to meet with the Disability/Retention Specialist in Rhodes Hall, Room 215B several weeks before enrolling in classes to determine eligibility for services. Students who qualify for services must meet with the disability services specialist before each quarter to arrange for their support services. Services are offered on a voluntary basis and the student must request them. For more information, please contact the Disabilities Services Office at 937.328.6019 or visit the Clark State website.

### SUCCESS CENTER

The College's Success Center in the Sara T. Landess Technology and Learning Center, Room 117, offers a full-service area for new and returning students. Tutoring is available on a walk-in basis Monday through Thursday, 8:30am-7pm and Friday, 8:30am-5pm Computers for Internet research and supplemental learning programs for a variety of classes are also available. Students can also take advantage of various study groups and workshops facilitated by the Success Center.

### OFFICE OF CAREER MANAGEMENT

Sound career choices are based on knowledge about yourself and the world of work. Whether you are choosing a major, researching your chosen career field or preparing for your job search, the Office of Career Management can help you meet these challenges. The Office of Career Management offers a full range of services designed to assist students in exploring the wide range of personal and professional choices open to them, and to find the career path that fits them best. All Clark State students and alumni are encouraged to use the Office of Career Management's web-based resume referral service, self-assessment, career exploration and job search resources. For more information on how we can help you, please call 937.328.6093, or visit us at the Sara T. Landess Technology and Learning Center or online at <http://careers.clarkstate.edu>.

### COOPERATIVE EDUCATION

Cooperative Education at Clark State combines paid work experience with academics. This combination of academic learning and on-the-job training can create a superior learning environment for you.

The alternate work program consists of a quarter of full-time study, then a quarter of full-time employment. The parallel work program allows you to work a half-day and study the other half. You can earn wages and three to five college credits per quarter. If you are already employed in your field of study, the Co-op program allows you to receive college credit for your work.

For more information, contact the Cooperative Education faculty member at 937.328.6073 or your advisor.

## **COLLEGE PREPARATORY EDUCATION**

College preparatory education (CPE) courses in reading, writing and mathematics are designed to build skills so that you'll succeed in college-level classes. If you have been away from the classroom for a number of years, did not develop strong basic academic skills in high school or do not have any background in an area that is an important part of your college program (algebra or chemistry, for example), you will benefit from these preparatory courses.

Placement into these courses is determined by the placement tests and by you and your advisor.

College preparatory education courses do not count toward graduation or in your cumulative grade point average. They do, however, count in the calculation of full-time status and are included in consideration for grants and other financial aid.

You may repeat a CPE course twice without permission. Permission to take a CPE course a third or more times must be obtained from a review panel convened by the Dean of Arts and Sciences.

## **PERSONAL GROWTH COURSES**

The Counseling Office offers a series of courses designed to support and enrich your academic work. These personal growth courses cover a variety of subjects from study skills to stress management skills and career exploration. They are intended to help you gain self-confidence and a greater sense of self-knowledge. For more information, see the PGR course descriptions in this catalog.

## **STUDENT SUCCESS PROGRAM**

The Student Success program offers support, special programs and assistance to lower-income Clark County students who are supporting minor children. Funded by the Clark County Department of Job and Family Services, this program leads students in addressing the barriers to success that they often face as parents. For more information, please call 937.328.3855 or visit us at [www.clarkstate.edu/wfd](http://www.clarkstate.edu/wfd).

## **HONORS**

We occasionally offer honors courses that parallel the Phi Theta Kappa Honors Society topic for the year. If you are

interested in enrolling in an honors course, you should speak with your academic advisor or counselor.

## **PHI THETA KAPPA**

Phi Theta Kappa is the International Honor Society for the two-year college. Phi Theta Kappa was established in 1918 and has over 1,000 chapters in the United States, Canada and Germany at colleges offering the associate degree. Clark State's chapter, Alpha Nu Lambda, was established in 1987. The purpose of Phi Theta Kappa is to promote scholarship, leadership, fellowship and service and to nurture its members, the campus and the community by sponsoring various activities which educate, stimulate and enrich. Induction into Phi Theta Kappa provides national recognition to students of distinguished achievement. To become a member of Phi Theta Kappa, you must have a grade point average of 3.5 or above and 18 credit hours toward an associate degree.

## **Academic Policies**

The following sections are intended to be an overview of academic policies and procedures at Clark State. For more detailed information, contact the Records and Registration Office. The Vice President of Academic and Student Affairs is ultimately responsible for developing and implementing academic policies.

### **ATTENDANCE**

Achievement of academic goals is best accomplished through regular class participation. Therefore, you are urged to attend all class and laboratory sessions. When unavoidable absences do occur, you should take the responsibility to contact your instructor to make arrangements for work that has been missed. Instructors have the right to issue a failing grade if you incur excessive absences and have not officially withdrawn from a course. Specific information concerning attendance is available in the course syllabus.

The College is required to report non-attendance to federal and state agencies that provide financial assistance to students. Failure to attend classes may also result in having to repay part or all of an allowance from the Veterans Administration or state or federal agencies.

### **ACADEMIC MISCONDUCT**

Academic misconduct includes cases of cheating, plagiarism or any other dishonesty or deception in fulfilling academic requirements.

Faculty members have the authority to issue a failing grade for any assignment in which academic misconduct has occurred. In serious or repetitive incidences, the faculty member may refer the issue to the appropriate administrator for further action. Such action may include issuing a failing grade in the course or expulsion from the institution.

## GRADE REPORTS

You can access your final grades through WebAdvisor. Grades will not be released over the phone. You may request an official copy of your grades in the Records and Registration Office or online. If you have a concern about a grade, you should discuss it with your instructor within five weeks after the end of the quarter. If the grade was for a Spring or Summer Quarter class, you should discuss it with your instructor by the fifth week of Fall Quarter. If the problem is still not resolved, you may discuss it with the divisional administrator and then the Vice President of Academic and Student Affairs.

## DEAN'S LIST

If you carry a minimum of six credit hours of college courses and maintain a grade point average of 3.5 or better for a quarter's work, you will be enrolled on the Dean's List in recognition of achievement that quarter. Grades of "satisfactory" and grades in college preparatory courses are not included in determining the grade point average.

## ACADEMIC PROBATION

You are considered to be on academic probation when your cumulative grade point average falls into the ranges listed below:

Hours attempted	Cumulative GPA
1-15	Below 1.50
16-30	Below 1.60
31-45	Below 1.70
46-60	Below 1.80
Over 60	Below 2.0

Probation means that you are in jeopardy of being dismissed from the College for academic reasons. If your average places you on probation, you should confer with your advisor to select a course schedule. Academic support services such as tutoring and the writing lab are strongly recommended for students on probation.

When on academic probation, you may carry a maximum load of 12 course credits. (This includes students accepted into the College on probation by the Admissions Office.) It is strongly recommended that you repeat any failed courses the next quarter those courses are offered.

## DISMISSAL

A student is dismissed from the College when his/her cumulative grade point average falls below the probation levels listed below. Dismissal means that you must sit out the quarter following the term in which your GPA falls below probation levels. However, you will be placed on probation at least one quarter before dismissal for academic reasons. During that probation term, you will receive a letter from the Records and Registration Office stating that failure to improve the GPA by the end of the quarter will result in dismissal.

You will be dismissed when your cumulative grade point average falls into the following ranges.

Hours attempted	Cumulative GPA
1-15	Below .80
16-30	Below .90
31-45	Below 1.20
46-60	Below 1.40
over 60	Below 1.60

## RE-ADMITTANCE

You may be re-admitted to Clark State on probation after you have sat out one quarter, completed the Petition for Re-Admission form available in the Records and Registration Office and have it reviewed and approved by the division dean or coordinator of advising.

Upon reinstatement, you must meet with the program advisor/divisional administrator to determine a course of action. You will be permitted to enroll for not more than 12 credit hours for each of the next two quarters and must maintain a 2.0 grade point average (GPA) in each of those quarters. Once this requirement is met, you and your program advisor/division dean will mutually agree upon the class load you will take for subsequent quarters.

In order to avoid being dismissed again, a quarter GPA of 2.0 must be maintained or dismissal will occur when your cumulative grade point average falls into one of the above ranges.

## COMPUTER LITERACY

Computer literacy is essential for Clark State graduates to be productive in the workplace. Clark State requires that you complete the computer requirements listed in your program.

## DEFINITION OF CREDIT HOUR

All academic credits are expressed in terms of credit hours. Clark State defines a credit hour based on the requirements of the Ohio Board of Regents.

## GRADING SYSTEM

Academic achievement is indicated by the following grades and points used in calculating grade point average:

A-Excellent	(4 grade points per credit hour)
B-Good	(3 grade points per credit hour)
C-Average	(2 grade points per credit hour)
D-Poor	(1 grade point per credit hour)
F-Failing	(0 grade points per credit hour)
Z-Non-Attendance*	(0 grade points per credit hour)

(\*Student registered for class but never attended)

Your GPA is obtained by dividing the total number of grade points earned in college credit courses by the total number of credit hours attempted in those courses. For example, consider the following grades earned by a student:

	<b>Credit Hours</b>	<b>Grade</b>	<b>Points</b>
Course 1	3	B	9
Course 2	3	C	6
Course 3	4	B	12
Course 4	3	C	6
<b>Totals</b>	<b>13</b>		<b>33</b>

The total number of grade points, 33, is determined by adding together the points earned in each course (credit hours x grade points). That number is then divided by the total number of credit hours, 13, to determine the grade point average. In this example the average is  $33/13 = 2.54$ .

Grades issued for college preparatory courses are not counted in your grade point average. A cumulative grade point average refers to the average for all college credit courses taken during your enrollment at the College. There are other symbols that can be issued for which no points are associated:

- S Satisfactory
- U Unsatisfactory
- I Incomplete
- PR Proficiency
- CR Credit
- NC No Credit
- EX Experiential Credit
- TR Transfer Credit
- AR Articulated Credit
- W Withdrawal
- X Audit
- IP In Progress (self-paced courses only)
- N No Grade Reported (Records Office use only)
- PG Progressing (college preparatory education only)

### **INCOMPLETE**

The incomplete I grade process may be initiated when you are progressing satisfactorily in a course, but for reasons beyond your control (e.g., illness or death in the family), you will not have completed all requirements for the course when final grades are submitted by the instructor.

You must notify your instructor by the last day of any quarter. If the instructor agrees to an I grade, it will be submitted on your grade report and the instructor will set up a schedule on the Incomplete Grade form for completion of the course requirements by midterm of the following quarter.

When you complete the class requirements, the instructor will change the I grade to another letter grade. If you do not

complete the requirements, the I grade will automatically be changed on Friday of the fifth week of the following quarter to an F grade on your transcript. A student receiving an incomplete grade at the end of Spring or Summer Quarter must complete all conditions by Friday of the fifth week of Fall Quarter.

### **GLOBAL AWARENESS**

Because of the importance of international events to our lives, we require each graduate to successfully complete a course or courses that emphasize global awareness. The number of classes varies with the degree being sought.

### **GRADUATION REQUIREMENTS**

To qualify for an associate degree, you must pass all required courses for your major and have a cumulative grade point average of at least 2.0. Students in the following majors must have a C as a minimum grade in all required major courses: Early Childhood Education, Early Elementary Paraprofessional, Emergency Medical, Medical Assisting, Medical Laboratory, Practical Nursing, Registered Nursing, Physical Therapist Assistant and Social Services. Students in the Realtime programs must have passed each of the terminal speed courses within 12 months prior to graduation.

All students are expected to complete the residency requirement of at least 30 credit hours of coursework at Clark State for an associate degree or 18 credit hours for a one-year certificate program. Credit equivalencies, such as articulated, experiential, transfer or proficiency credit do not count toward the residency requirement. Credit equivalencies may not exceed one half of the required technical course credits for the degree or certificate program being pursued unless recommended by the faculty and approved by the divisional administrator.

All financial obligations to the College (instructional fees, general fees, laboratory fees, technology fees, library fines, parking fines) must be paid and all College equipment returned before your grades or a diploma will be issued by the College.

### **GRADUATION PROCESS**

Graduates earn one of the following degrees: Associate of Arts, Associate of Science, Associate of Applied Business, Associate of Applied Science or Associate of Technical Studies. Students who complete 1 year certificate programs may also participate in the graduation ceremony.

Students wishing to graduate must submit a Petition to Graduate Form to the Records and Registration Office. Students who fail to petition to graduate within 12 months of last enrollment in courses within the curriculum must meet the curricular requirements in force at the time of their petition. If you anticipate completing graduation requirements by the end of Spring or Summer quarter you



should complete the Petition to Graduate form prior to March 31. If you anticipate completing graduation requirements by the end of Fall or Winter quarter, you have until the last day of the quarter to submit your Petition form. Students who do not complete the graduation requirements by the end of the designated term on their petition must submit another Petition to Graduate form to the Records and Registration Office once requirements are met.

The graduation ceremony is held in June. Blank diplomas will be issued at graduation. If you finish your degree or certificate requirements at the end of the Fall, Winter or Spring Quarters, your diploma will be mailed at that time and you may elect to participate in the June graduation ceremony.

If you have a cumulative 2.0 average and need no more than four courses that will be offered during the Summer Quarter to complete degree requirements, you may petition the Records and Registration Office for graduation and participate in the June graduation ceremony. Diplomas will be issued after your degree requirements are completed during the Summer Quarter.

Students with a cumulative grade point average of 3.5 or better at the end of Winter Quarter will be recognized at commencement as honor students. Each student bears responsibility for scheduling those courses necessary to complete graduation requirements. Students who interrupt their attendance for more than one academic year and later return must meet the curricular requirements in force at the time of their return.

## **STUDENT CLASSIFICATION**

You are considered full-time when you are enrolled in at least 12 credit hours. If you carry 11 credit hours or less per quarter, you are part-time.

You are a first-year student if you are registered in a specific program and have earned fewer than 46 quarter hours of credit, including transfer credit. You are a second-year student once you have earned 46 or more quarter hours.

## **CREDIT EQUIVALENCIES**

You may qualify for academic credit for college-level learning gained outside of college through a variety of methods including business or government training recommended by the American Council on Education (ACE); CLEP, College Board Advanced Placement tests, Military service training recommended by ACE; Portfolio evaluation; and credit by examination. To learn more about the available options contact the Records and Registration Office or visit with your advisor.

## **TRANSFER CREDITS TO CLARK STATE**

You can be granted credit toward a degree at Clark State for work completed at other regionally accredited colleges and universities for courses with a grade of C or better. Some credits may not apply to specific degree programs. The credits

must have been earned within a certain time period to be considered current and acceptable. An official transcript needs to be submitted from each college where credits were earned. Transfer credit is evaluated on a course-by-course basis once you have applied to Clark State. Until you are notified, you are responsible for not duplicating courses for which you may obtain transferable credit.

Applicable technical and basic courses taken within the last five years generally will be accepted to meet program requirements. Some technologies have more stringent requirements; so contact your division in order to determine what requirements apply.

If you change majors while attending Clark State, you should ask the Records and Registration Office to reevaluate the transcript for additional transfer credits. Those required by the new major will be considered toward degree completion. Transferred credits are counted in the cumulative hours completed but are not counted in the cumulative grade point average.

Decisions regarding acceptance of transfer credit are made by divisional administrators and the Transfer Credit Specialist. If you disagree with a decision, you may follow the appeals process. The appeals process begins with the completion of the Appeal for Credit form located in the Records and Registration Office.

## **Athletics/Intramurals**

Clark State Community College offers five intercollegiate athletic programs:

- Men's Basketball
- Men's Baseball
- Women's Basketball
- Women's Softball
- Women's Volleyball

As a member of the National Junior College Athletic Association, NJCAA, all Clark State athletes will compete in division III beginning in the fall of 2008. You can also participate in recreational and intramural sports. Some of the activities include flag football, co-ed volleyball and whiffleball. If there is an activity that is not offered and you are interested in starting one, contact the athletic director to initiate the process.



# Degree Programs

2008  
2009

Clark State offers more than 80 associate degree and certificate programs. Interested in transferring to a four-year college or university? Check out our Associate of Arts and Associate of Science programs.

## **ACCOUNTING**

### **Accounting**

Accounting Certificate

## **ADVANCED TECHNICAL INTELLIGENCE CONCENTRATION**

## **AGRICULTURE**

### **Agricultural Business**

Agriculture Engineering Technology Option

### **Horticulture Industries**

Golf Course Operations Option

Landscape Design Option

Nursery Operations Option

Parks and Recreation Operations Option

Turf and Landscape Operations Option

### **Agriculture Departmental Certificates**

Agricultural Business Certificate

Agricultural Engineering Technology Certificate

Agriculture Equipment Certificate

Landscape Design Certificate

Parks and Recreation Operations Certificate

Agriculture Pest Certificate

Turf Certificate

## **ASSOCIATE OF ARTS**

## **ASSOCIATE OF SCIENCE**

## **BUSINESS TRANSFER - WRIGHT STATE UNIVERSITY**

## **CAREER AND TECHNICAL EDUCATION - ATS**

## **COMPUTER NETWORKING**

### **Computer Networking**

Advanced Computer Networking Option

CyberSecurity Specialist Option

Technical Systems Support Option

### **Computer Networking Departmental Certificates**

CyberSecurity Certificate

Network Administration Certificate

Network Infrastructure Certificate

Oracle Database Management Certificate

Technical Support Certificate

## **COMPUTER SOFTWARE DEVELOPMENT**

### **Computer Software Development**

### **Computer Software Development Departmental Certificates**

Computer Software Development/Programming  
Certificate

Microsoft Database Administration/Programming  
Certificate

Systems Analysis Certificate

Web Services Certificate

## **CRIMINAL JUSTICE**

### **Basic Peace Officer Academy**

### **Corrections**

### **Criminal Justice Technology**

## **EARLY CHILDHOOD EDUCATION**

See Teacher Education Preparation

## **EMERGENCY MEDICAL SERVICES**

### **Emergency Medical Services**

### **Emergency Medical Services Departmental Certificates**

EMT-Basic Certification

EMT-Intermediate Certification

Paramedic Certification

Paramedic Certification for Registered Nurses

## **ENGLISH TRANSFER - WRIGHT STATE UNIVERSITY**

## **GRAPHIC DESIGN**

### **Graphic Design**

## **INDUSTRIAL AND ENGINEERING TECHNOLOGIES**

### **Computer-Aided Design Technology**

### **Engineering Transfer**

### **Industrial Technology**

### **Manufacturing Engineering Technology**

Mechanical Engineering Technology

Computer-Aided Design (CAD) Certificate

Electrical Maintenance Certificate

Electronics Certificate

Manufacturing Certificate

## **MANAGEMENT**

### **Management Technology**

CyberSecurity Management Option

Human Resource Management Option

Logistics and Supply Chain Management Option

Marketing and E-Business Option

Management Certificate

### **Management Departmental Certificates**

Customer Service Certificate

Human Resource Management Certificate

Logistics and Supply Chain Management Certificate

Marketing and E-Business Certificate

Small Business Certificate

Supervisory Certificate

## **MEDICAL ASSISTING**

### **Medical Assisting**

Medical Assisting Certificate

## **MEDICAL LABORATORY**

### **Medical Laboratory Technology**

## **MULTI-SKILLED HEALTH CARE**

Multi-Skilled Health Care Certificate

### **Health Care Departmental Certificates**

Electrocardiography  
Nurse Aide  
Patient Care Technician  
Phlebotomy

## **NURSING**

### **Nursing Transition LPN to RN**

Practical Nursing Certificate  
Practical Nursing Certificate-Evening Weekend

### **Registered Nursing**

### **Registered Nursing - Evening**

## **OFFICE ADMINISTRATION**

### **Professional Office Administration**

Medical Office Administration Major  
Office Administration Certificate

### **Office Administration Departmental Certificates**

Communication Certificate  
Advanced Medical Coding Certificate  
Medical Transcription Certificate

## **PARALEGAL**

### **Paralegal Technology**

## **PHOTOGRAPHY**

Photography Certificate

## **PHYSICAL THERAPY**

### **Physical Therapist Assistant**

## **PSYCHOLOGY AS - WRIGHT STATE UNIVERSITY**

## **PSYCHOLOGY AA - WRIGHT STATE UNIVERSITY**

## **REALTIME REPORTING**

### **Judicial Reporting**

Broadcast Captioning/CART Option  
Judicial Reporting Scopist Certificate

## **SOCIAL SERVICES**

### **Social Services Technology**

### **Social Services Departmental Certificate**

Chemical Dependency

### **Associate of Arts Pre-Social Work Transfer- Wright State University**

## **TEACHER EDUCATION PREPARATION**

### **Early Childhood Education Technology**

Early Childhood Education-Early Literacy Option  
Early Childhood Education-Special Needs Option  
Early Childhood Education-Administration Option

### **Early Childhood Education Departmental Certificates**

Early Literacy Development Certificate

### **Early Elementary Paraprofessional (Teaching Assistant)**

### **Associate of Arts Early Childhood Education Transfer Concentration**

## **THEATRE ARTS**

### **Theatre Arts**

Performance Theatre Option  
Technical Theatre Option

### **Theatre Arts Departmental Certificate**

Arts Administration Departmental Certificate

# Accounting

## ACCOUNTING TECHNOLOGY

Accountants compile and analyze business transactions and prepare financial reports such as income statements, balance sheets, cash flow statements, cost studies and tax reports. The major fields are public, management and governmental accounting. Accountants in any field may work in such areas as general accounting, auditing, taxes, cost accounting, budgeting and control, information processing or systems and procedures.

Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

This program is available to both day and evening students. Students should consult with their advisor for the recommended sequencing of evening courses.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Accounting, a graduate will be able to:

- perform basic accounting functions in an established accounting system.
- apply generally accepted accounting principles as they relate to recording, measuring and communicating financial information.
- prepare financial reports for internal and external use.
- use microcomputer accounting software to perform necessary accounting functions for a profit-making enterprise.
- calculate amounts for and prepare fundamental individual federal, state and local tax returns.
- calculate amounts for and prepare fundamental business federal, state and local returns.
- record, analyze and use cost information for job order and process cost systems.
- apply accounting principles related to governmental and not-for-profit entities.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However,

at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ACC 111	Principles of Accounting I	4
COM 121	Public Speaking	3
ENG 111	English I	4
ITS 103	Information Technology Basics	3
MGT 105	Contemporary American Business	3
<b>Winter</b>		
ACC 112	Principles of Accounting II	4
ENG 112	English II or	
ENG 135	Business Report Writing*	4
ITS 125	Beginning Spreadsheet	1
MGT 112	Principles of Management	4
MTH 106	Business Mathematics	3
<b>Spring</b>		
ACC 113	Principles of Accounting III	4
ACC 120	Microcomputer Accounting Systems	4
ENG 221	Business Communication	3
MGT 260	Legal Environment of Business	3
- -	Social Science Elective***	3
<b>Fall</b>		
ACC 205	Spreadsheet Accounting	4
ACC 211	Intermediate Accounting I	4
ACC 221	Tax Accounting I	4
ITS 12D	Beginning Database	1
STT 264	Statistics I	4
<b>Winter</b>		
ACC 212	Intermediate Accounting II	4
ACC 222	Tax Accounting II	4
ECO 221	Principles of Macroeconomics	3
MGT 270	Business Finance**	4
- -	Humanities/Social Science Elective***	3
<b>Spring</b>		
ACC 213	Intermediate Accounting III	4
ACC 233	Cost Accounting	4
ACC 250	Government and Non-Profit Acctg	4
ECO 222	Principles of Macroeconomics	3
- -	Humanities/Social Science Elective***	3
Total Credit Hours		103

\*ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

\*\*The following co-op experiences may be substituted for MGT 270: EBE 100 plus EBE 282.

\*\*\*ECO 110 is not acceptable for a social science elective; at least one humanities or one social science elective must be designated as a global awareness (GA) course.

\*Any accounting course not already prescribed.

\*\*ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

## ACCOUNTING CERTIFICATE

Accounting, long referred to as the “language of business,” is an excellent foundation for any type of office position. Most managerial positions require an understanding of accounting. This program provides the basic courses that teach fundamentals of recording business transactions, the balance sheet, the income statement, basic cost accounting concepts/entries and individual taxes. Courses are applicable to the associate degree program.

Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ACC 111	Principles of Accounting I	4
ACC -	Accounting Elective*	4
ENG 111	English I	4
ITS 103	Information Technology Basics	3
MGT 105	Contemporary American Business	3
<b>Winter</b>		
ACC 112	Principles of Accounting II	4
COM 121	Public Speaking	3
ENG 112	English II or	
ENG 135	Business Report Writing**	4
ITS 12S	Beginning Spreadsheet	1
MTH 106	Business Mathematics	3
<b>Spring</b>		
ACC 113	Principles of Accounting III	4
ACC 120	Microcomputer Accounting Systems	4
ACC 205	Spreadsheet Accounting	4
ENG 221	Business Communication	3
MGT 260	Legal Environment of Business	3
	Total Credit Hours	51

# Advanced Technical Intelligence Concentration

## ADVANCED TECHNICAL INTELLIGENCE

The Advanced Technical Intelligence (ATI) degree program is designed for individuals desiring a career in ATI and, in particular, Advanced Geospatial Intelligence (AGI) and Measurement and Signature Intelligence (MASINT). The course of study is also designed for working professionals wishing to extend their knowledge of ATI or those desiring to change career paths within industry and government.

Students must be US Citizens and be able to qualify for a security clearance in order to complete the course of study. The program serves to develop the advanced technical intelligence workforce of the future by familiarizing the students with the ATI field and by providing them core knowledge of the collection and analysis methods applied by ATI professionals to solve today's hardest intelligence problems.

There is a critical shortfall in trained and cleared analysts, engineers, scientists, managers, information technologists, and other support fields to meet the Nation's need to make use of today's intelligence systems and to prepare for tomorrow's advanced technologies that are currently under development by the Department of Defense, National Intelligence Organizations, and Service and National acquisition programs.

### Learning Outcomes

Upon completion of the Associate of Science degree in Advanced Technical Intelligence, a graduate will be able to meet the goals outlined for the general associate of science degree; additionally, the student will:

- obtain a security clearance
- demonstrate knowledge of the collection methods applied by ATI professionals
- demonstrate proficiency in analysis methods applied by ATI professionals

### Scholastic Preparation

Students starting the degree program should have at least one year each of high school algebra, trigonometry, and physics and experience in a technical field. Students who do not have this background will be required to take MTH 120 or 121, MTH 122, MTH 140, and PHY 110 or PHY 111, 112, and 113 as part of their degree plan. Students that do not have these prerequisites should consult with the ATIC Program Director before registering for ATI courses numbered higher than 101.

Students who wish to transfer credits to a baccalaureate program should consult with the institution to which they intend to transfer. This degree plan serves as a general guideline for transfer. The best selection of courses for a

given student will vary depending upon the area of study in which the student is interested and the institution to which the student plans to transfer.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ENG 111	English I	4
ATI 101	Introduction to the Intelligence Community	3
HST 111	Western Civilization to the 14th Century	3
MTH 121	College Algebra I	3
ITS 12A	Windows Concepts	2
ITS 12W	Beginning Word Processing	1
<b>Winter</b>		
ENG 112	English II	4
MTH 122	College Algebra II	3
CHM 110	Fundamentals of Chemistry	5
HST 112	Western Civilization through 18th Century	3
ITS 12D	Beginning Database	1
ITS 12P	Beginning Presentation Graphics	1
ITS 12S	Beginning Spreadsheet	1
<b>Spring</b>		
ENG 223	Technical Report Writing	3
HST 113	Western Civilization to Present	3
MTH 140	Trigonometry	3
PHL 200	Critical Thinking	3
RST **	Regional Studies	3
COM 121	Public Speaking	3
<b>Fall</b>		
ATI 110	Fundamentals of Remote Sensing	3
GEO 110	World Regional Geography	3
RST**	Regional Studies	3
PHY 111	Physics I	4
ENG 230	Great Books: World Literature	3
PLS 230	International Politics	3
<b>Winter</b>		
ATI 210	Introduction Spectral Sensing/ Apps Intelligence	3
ATI 215	Introduction to Radar for Intelligence	3
PHY 112	Physics II	4
GLG 130	Earth & Space Science	5
GEO 220	World Human Geography	3
<b>Spring</b>		
HUM 299	Capstone	3
PHY 113	Physics III	4
PHL 205	Deductive Logic	3
ART 130	Appreciation of the Arts	3
ATI 220	Introduction Overhead Non-Imaging Infrared	3
ATI 225	MAISNT Fundamentals	3
<b>Total Credit Hours</b>		<b>108</b>

\*\*Choose from Regional Studies: 260: Asia-China, Regional Studies: 262: North India, Regional Studies: 270: Africa, or Regional Studies: 280: Latin America

# Agriculture

## AGRICULTURAL BUSINESS

The Agricultural Business program emphasizes preparation for agriculture service industry occupations. Courses are offered in soil science, animal science, weed and pest management, sales, business management, marketing and economics. The curriculum is designed to prepare students for employment in the business world of agriculture sales and service. Graduates of this program will find technical and entry-level management positions in crop care companies, feed and livestock product companies and many other businesses that serve the producer with goods and services.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Agricultural Business or Agriculture Engineering Technologies, a graduate will be able to:

- identify plant nutrient deficiencies and describe corrective measures.
- develop a written agricultural business plan.
- locate current information in solving technical and critical thinking problems.
- demonstrate effective employability skills.
- demonstrate basic sales principles.
- identify major plant pests, including weeds, insects and diseases (Ag Business).
- weld using basic arc welding and oxy-acetylene welding techniques (Ag Engineering).
- demonstrate basic trouble shooting and maintenance skills for small gas engines (Ag Engineering).

### Scholastic Preparation

High school chemistry, biology, geometry, algebra and keyboarding skills are strongly recommended.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

## Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 150	Soil Science	4
AGR -	Ag Elective*	3
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
<b>Winter</b>		
AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
BIO 140	Plant Science	4
ENG 112	English II	4
--	Social Science Elective	3
<b>Spring</b>		
AGR 19B	Agribusiness Co-op Experience I	4
<b>Summer</b>		
AGR 109	Animal Agriculture	4
COM 121	Public Speaking	3
<b>Fall</b>		
AGR 122	Plant Pests	4
AGR 174	Agribusiness Principles	3
AGR 214	Crop Production	4
ACC 111	Principles of Accounting I	4
--	Humanities/Social Science Elective (GA)	3
<b>Winter</b>		
AGR 105	Principles of Ag Sales I	3
AGR 253	Pest Management	5
AGR 284	Agribusiness Management	4
AGR -	Ag Elective*	3
ENG 223	Technical Report Writing	3
<b>Spring</b>		
AGR 106	Principles of Ag Sales II	3
AGR 206	Agribusiness Marketing	3
AGR 262	International Ag Trade	3
AGR 295	Agriculture Capstone Seminar	3
ECO -	ECO 110 or ECO 221 or ECO 222	3
--	Humanities/Social Science Elective	3
<b>Total Credit Hours</b>		<b>100</b>

\*AGR electives may be any AGR course not required above. Suggested courses include: AGR 115 Welding, AGR 187 Small Gas Engines, AGR 29B Agribusiness Co-op Experience II, AGR 245 Advanced Welding, AGR 252 Equipment Maintenance, INT 120 Hydraulic/Pneumatics I or INT 150 Electrical Systems. Other coursework may be approved by the division.



## AGRICULTURAL ENGINEERING TECHNOLOGY OPTION

Powered equipment maintenance, facility maintenance and construction and hardscape construction are emphasized leading to careers with a mechanical emphasis in the agricultural industry.

Course #	Course Title	Credit Hours
<b>Fall</b>		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 150	Soil Science	4
AGR 187	Small Gas Engines	4
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
<b>Winter</b>		
AGR 108	Technical Math for Agriculture	3
AGR 115	Welding	3
AGR 151	Soil Fertility	4
COM 121	Public Speaking	3
ENG 112	English II	4
<b>Spring</b>		
AGR 219	Landscape Construction	4
AGR 224	Irrigation Systems	3
ENT 205	Circuits and Machines	4
- -	Humanities/Social Science Elective (GA)	3
<b>Summer</b>		
AGR 19E	Agriculture Engineering Co-op Experience I	4
<b>Fall</b>		
AGR 174	Agribusiness Principles	3
AGR 225	Landscape Maintenance	4
AGR -	Ag Elective	3
ENG 223	Technical Report Writing	3
INT 120	Hydraulics/Pneumatics I	4
<b>Winter</b>		
AGR 105	Principles of Ag Sales I	3
AGR 252	Equipment Maint and Operation	4
AGR 284	Agribusiness Management	4
INT 170	Mechanical Maintenance	4
	Social Science Elective	3
<b>Spring</b>		
AGR 106	Principles of Ag Sales II	3
AGR 245	Advanced Welding	4
AGR 295	Agriculture Capstone Seminar	3
INT 125	Hydraulic/Pneumatics II	4
- -	Humanities/Social Science Elective	3
	<b>Total Credit Hours</b>	<b>105</b>

\*AGR electives may be any AGR course not required above. Suggested courses include: AGR 29E Ag Engineering Co-op Experience II, AGR 122 Plant Pests or INT 150 Electrical Systems. Other coursework may be approved by the division.

## HORTICULTURAL INDUSTRIES

The Horticultural Industries program provides basic preparation for careers in the landscape and turfgrass industries. The campus grounds, including a greenhouse facility and a one-hole golf course, act as a working laboratory to give students practical training. Clark State students can specialize in areas of golf course maintenance, nursery operations, landscape design, parks and recreation or turf and landscape maintenance.

These program schedules are designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Science degree in Horticultural Industries, a graduate will be able to:

- identify plant nutrient deficiencies and describe corrective measures.
- identify major plant pests, including weeds, insects and diseases.
- develop a written agricultural business plan.
- locate current information in solving technical and critical thinking problems.
- demonstrate effective employability skills.
- identify common landscape and herbaceous plant materials.
- demonstrate the proper care of established plants in the landscape.

### Scholastic Preparation

High school chemistry, biology, geometry, algebra and keyboarding skills are strongly recommended.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

## GOLF COURSE OPERATIONS OPTION

Turf science and landscape maintenance as they apply to maintaining the golf course are emphasized, leading to a career in the golf course industry.

Course #	Course Title	Credit Hours
<b>Fall</b>		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 133	Turf Science	3
AGR 150	Soil Science	4
AGR 187	Small Gas Engines	4
ENG 111	English I	4
<b>Winter</b>		
AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
BIO 140	Plant Science	4
ENG 112	English II	4
ENT 121	Computer Basics for Applied Technology	3
<b>Spring</b>		
AGR 19G	Golf Course Co-op Experience I	3
AGR 224	Irrigation Systems	3
--	Humanities/Social Science Elective (GA)	3
<b>Summer</b>		
AGR 29G	Golf Course Co-op Experience II	3
COM 121	Public Speaking	3
--	Humanities/Social Science Elective	3
<b>Fall</b>		
AGR 122	Plant Pests	4
AGR 143	Landscape Plant Materials	4
AGR 174	Agribusiness Principles	3
AGR 225	Landscape Maintenance	4
AGR 236	Turfgrass Management	3
<b>Winter</b>		
AGR 252	Equipment Maintenance and Operation	4
AGR 253	Pest Management	5
AGR 284	Agribusiness Management	4
ACC 111	Principles of Accounting I	4
<b>Spring</b>		
AGR 145	Herbaceous Plant Materials	4
AGR 219	Landscape Construction	4
AGR 295	Agriculture Capstone Seminar	3
ENG 223	Technical Report Writing	3
--	Social Science Elective	3
Total Credit Hours		106

## LANDSCAPE DESIGN OPTION

Landscape plant materials, drafting and computer-aided design are emphasized leading to a career in landscape design.

Course #	Course Title	Credit Hours
<b>Fall</b>		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 143	Landscape Plant Materials	4
AGR 150	Soil Science	4
DFT 101	Drafting I	3
ENG 111	English I	4
<b>Winter</b>		
AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
AGR 226	Landscape Design	4
BIO 140	Plant Science	4
ENT 121	Computer Basics for Applied Technology	3
<b>Spring</b>		
AGR 19L	Landscape Design Co-op Experience I	3
AGR 145	Herbaceous Plant Materials	4
ENG 112	English II	4
<b>Summer</b>		
AGR 29L	Landscape Design Co-op Experience II	3
--	Humanities/Social Science Elective (GA)	3
<b>Fall</b>		
AGR 122	Plant Pests	4
AGR 174	Agribusiness Principles	3
AGR 225	Landscape Maintenance	4
COM 121	Public Speaking	3
ENG 223	Technical Report Writing	3
<b>Winter</b>		
AGR 105	Principles of Ag Sales I	3
AGR 284	Agribusiness Management	4
AGR 297	Landscape Design II	4
DFT 211	Computer-Aided Design	4
<b>Spring</b>		
AGR 219	Landscape Construction	4
AGR 287	Computer-Aided Landscape Design	4
AGR 295	Agriculture Capstone Seminar	3
--	Social Science Elective	3
--	Humanities/Social Science Elective	3
Total Credit Hours		102

## NURSERY OPERATIONS OPTION

Landscape plant materials, landscape installation and landscape plant production are areas emphasized leading to careers in the garden center and nursery industries.

Course #	Course Title	Credit Hours
<b>Fall</b>		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 143	Landscape Plant Materials	4
AGR 150	Soil Science	4
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
<b>Winter</b>		
AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
AGR 226	Landscape Design I	4
AGR -	Ag Elective*	3
BIO 140	Plant Science	4
<b>Spring</b>		
AGR 19N	Nursery Operations Co-op Experience I	3
AGR 145	Herbaceous Plant Materials	4
ENG 112	English II	4
<b>Summer</b>		
AGR 29N	Nursery Operations Co-op Experience II	3
--	Humanities/Social Science Elective (GA)	3
<b>Fall</b>		
AGR 122	Plant Pests	4
AGR 174	Agribusiness Principles	3
AGR 225	Landscape Maintenance	4
ACC 111	Principles of Accounting I	4
COM 121	Public Speaking	3
<b>Winter</b>		
AGR 105	Principles of Ag Sales I	3
AGR 231	Plant Propagation	4
AGR 253	Pest Management	5
AGR 284	Agribusiness Management	4
<b>Spring</b>		
AGR 219	Landscape Construction	4
AGR 295	Agriculture Capstone Seminar	3
ENG 223	Technical Report Writing	3
--	Science Elective	3
--	Humanities/Social Science Elective	3
	<b>Total Credit Hours</b>	<b>103</b>

\*AGR electives may be any AGR course not required above. Suggested courses include: AGR 224 Irrigation Systems, AGR 252 Equipment Maintenance, AGR 297 Landscape Design II or INT 150 Electrical Systems. Other coursework may be approved by the division.

## PARKS AND RECREATION OPERATIONS OPTION

Tree and shrub identification, landscape maintenance turf science and communication skills are emphasized leading to careers in the parks and recreational industry.

Course #	Course Title	Credit Hours
<b>Fall</b>		
AGR 104	Agriculture Survey & Employment Skills	3
AGR 133	Turf Science	3
AGR 150	Soil Science	4
DFT 101	Drafting I	3
ENG 111	English I	4
<b>Winter</b>		
AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
BIO 140	Plant Science	4
ENG 112	English II	4
ENT 121	Computer Basics for Applied Technology	3
<b>Spring</b>		
AGR 19P	Parks & Rec. Co-op Exp I	3
AGR 145	Herbaceous Plant Materials	4
<b>Summer</b>		
AGR 29P	Parks and Rec. Co-op Exp II	3
COM 111	Interpersonal Communication	3
COM 121	Public Speaking	3
<b>Fall</b>		
AGR 122	Plant Pests	4
AGR 143	Landscape Plant Materials	4
AGR 174	Agribusiness Principles	3
AGR 225	Landscape Maintenance	4
AGR 236	Turfgrass Management	3
<b>Winter</b>		
AGR 252	Equipment Maintenance & Operation	4
AGR 253	Pest Management	5
AGR 284	Agribusiness Management	4
ENG 223	Technical Report Writing	3
<b>Spring</b>		
AGR 219	Landscape Construction	4
AGR 295	Agriculture Capstone Seminar	3
ACC 111	Principles of Accounting I	4

--	Humanities/Social Science Elective	3
--	Social Science Elective	3
	Total Credit Hours	102

--	Social Science Elective	3
--	Humanities/Social Science Elective	3
	Total Credit Hours	102

### TURF AND LANDSCAPE OPERATIONS OPTION

Turfgrass science and turf management as well as landscape maintenance are emphasized leading to careers in the lawn care and landscape maintenance industries.

Course #	Course Title	Credit Hours
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#### Fall

AGR 104	Agricultural Survey and Employment Skills	3
AGR 133	Turf Science	3
AGR 150	Soil Science	4
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3

#### Winter

AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
BIO 140	Plant Science	4
COM 121	Public Speaking	3
ENG 112	English II	4

#### Spring

AGR 19T	Turf and Landscape Co-op Experience I	3
AGR 145	Herbaceous Plant Materials	4

#### Summer

AGR 29T	Turf and Landscape Co-op Experience II	3
ENG 223	Technical Report Writing	3
--	Humanities/Social Science Elective (GA)	3

#### Fall

AGR 122	Plant Pests	4
AGR 143	Landscape Plant Materials	4
AGR 174	Agribusiness Principles	3
AGR 225	Landscape Maintenance	4
AGR 236	Turfgrass Management	3

#### Winter

AGR 105	Principles of Ag Sales I	3
AGR 252	Equipment Maintenance and Operation	4
AGR 253	Pest Management	5
AGR 284	Agribusiness Management	4

#### Spring

AGR 219	Landscape Construction	4
AGR 295	Agriculture Capstone Seminar	3
ACC 111	Principles of Accounting I	4

### AGRICULTURAL DEPARTMENTAL CERTIFICATES

#### AGRICULTURAL BUSINESS CERTIFICATE

This certificate provides skills in a variety of areas necessary to begin a successful career in the Agricultural Business career field.

Course #	Course Title	Credit Hours
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#### Fall

AGR 104	Agriculture Survey and Employment Skills	3
AGR 150	Soil Science	4
AGR 174	Agribusiness Principles	3
ENG 111	English I	4

#### Winter

AGR 105	Principles of Ag Sales	3
AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
ENT 121	Computer Basics for Applied Technology	3

#### Spring

AGR 106	Ag Sales II	3
AGR 206	Agribusiness Marketing	3

Total Credit Hours	33
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### AGRICULTURAL ENGINEERING TECHNOLOGY CERTIFICATE

This certificate provides skills in a variety of areas necessary to begin a successful career in the Agricultural Engineering Technology career field.

Course #	Course Title	Credit Hours
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#### Fall

AGR 104	Agriculture Survey and Employment Skills	3
AGR 187	Small Gas Engines	4
ENT 121	Computer Basics for Applied Technology	3
INT 120	Hydraulics/Pneumatics I	4

#### Winter

AGR 105	Principles of Ag Sales	3
AGR 115	Welding	3
AGR 252	Equipment Maintenance and Operation	4
ENT 205	Circuits and Machines	4

**Spring**

AGR 219	Landscape Construction	4
AGR 245	Advanced Welding	4
AGR	AGR/INT Elective*	3
INT 170	Mechanical Maintenance	4
Total Credit Hours		43

**Spring**

AGR 145	Herbaceous Plant Materials	4
AGR 219	Landscape Construction	4
AGR 287	Computer Aided Landscape Design	4
Total Credit Hours		40

**AGRICULTURAL EQUIPMENT CERTIFICATE**

This certificate provides skills in a variety of areas necessary to begin a successful career in the Agricultural Equipment career field.

Course #	Course Title	Credit Hours
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**Fall**

AGR 104	Ag Survey and Employment Skills	3
AGR 187	Small Gas Engines	4
AGR 225	Landscape Maintenance	4
ENT 121	Computer Basics for Applied Technology	3

**Winter**

AGR 115	Welding	3
AGR 252	Equipment Maintenance and Operation	4
ENT 150	Electrical Systems	4
INT 170	Mechanical Maintenance	4

**Spring**

AGR 219	Landscape Construction	4
AGR 224	Irrigation Systems	3
AGR 245	Advanced Welding	4
INT 120	Hydraulics/Pneumatics I	4
Total Credit Hours		44

**LANDSCAPE DESIGN CERTIFICATE**

This certificate is designed for the landscape design technician. The coursework will provide a foundation for entry into the landscape design career field.

Course #	Course Title	Credit Hours
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**Fall**

AGR 104	Agriculture Survey and Employment Skills	3
AGR 143	Landscape Plant Materials	4
AGR 225	Landscape Maintenance	4
DFT 101	Drafting I	3

**Winter**

AGR 105	Principles of Ag Sales I	3
AGR 226	Landscape Design	4
DFT 211	Computer Aided Design	4
ENT 121	Computer Basics for Applied Technology	3

**PARKS AND RECREATION OPERATIONS CERTIFICATE**

This certificate is designed for someone interested in a career in the parks and recreation career field. The course work is designed to provide skills and information to be successful in an entry level parks and recreation job.

Course #	Course Title	Credit Hours
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**Fall**

AGR 104	Agriculture Survey and Employment Skills	3
AGR 133	Turf Science	3
AGR 143	Landscape Plant Materials	4
AGR 150	Soil Science	4
AGR 225	Landscape Maintenance	4

**Winter**

AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
AGR 252	Equipment Maintenance & Operation	4
ENT 121	Computer Basics for Applied Technology	3

**Spring**

AGR 145	Herbaceous Plant Materials	4
AGR 219	Landscape Construction	4
COM 111	Interpersonal Communication	3
COM 121	Public Speaking	3

Total Credit Hours	46
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**AGRICULTURAL PEST CERTIFICATE**

This certificate is designed to provide entry level skills and knowledge necessary to gain an Ohio pesticide applicators license.

Course #	Course Title	Credit Hours
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**Fall**

AGR 104	Agriculture Survey and Employment Skills	3
AGR 122	Plant Pests	4
AGR 150	Soil Science	4
ENT 121	Computer Basics for Applied Technology	3

**Winter**

AGR 105	Principles of Ag Sales I	3
AGR 108	Technical Math for Agriculture	3

AGR 243	Pest Management	5
BIO 151	Soil Fertility	4
	Total Credit Hours	29

### **TURF CERTIFICATE**

This certificate is designed to provide the skills and knowledge to be successful in an entry-level position in the turf industry.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
<b>Fall</b>		
AGR 104	Agriculture Survey and Employment	3
AGR 133	Turf Science	3
AGR 150	Soil Science	4
AGR 225	Landscape Maintenance	4
<b>Winter</b>		
AGR 105	Principles of Ag Sales I	3
AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
AGR 236	Turfgrass Management	3
ENT 121	Computer Basics for Applied Technology	3
	Total Credit Hours	30

# Associate of Arts

## ASSOCIATE OF ARTS

Four-year colleges and universities generally require that students spend a significant portion of their first two years taking courses that build their knowledge and skills in general education. A student with an AA degree may transfer these courses to a four-year institution. Of the 92 credit hours necessary to earn an AA degree at Clark State, a minimum of 59 credit hours must come from areas 1-6 in the outline of degree requirements. The AA/AS degree focuses on courses in the liberal arts and sciences.

The remaining credit hours are divided among courses in the student's area of concentration, elective courses and the Capstone Seminar. All entering students must take the Capstone Seminar in order to complete the AA degree.

The courses in the area of concentration as well as the electives should be directed toward the student's major at the transfer institution. These courses must be selected very carefully, following the recommendations of the transfer institution. Of the 30 hours of coursework in these two categories, no more than 15 should be selected from technical/career programs unless indicated in a curriculum guide or planned with an advisor with the division dean's approval.

Transfer institutions make the determination in acceptance of credit. The student should consult his/her academic advisor and the intended transfer institution when planning a schedule of classes. With careful scheduling and advising, a student should be able to transfer with junior standing, especially within the state of Ohio.

### Learning Outcomes

Upon completion of an associate degree in Associate of Arts, a graduate will be able to:

- write clearly (Area 1).
- think critically (Area 1).
- critically analyze a work of literature, music, theatre, art, or architecture (Area 2).
- analyze and evaluate issues of the human historical and philosophical experience (Area 3).
- describe and assess divergent aspects of individual and group human behavior (Area 4).
- demonstrate mathematical and computer literacy (Area 5).
- identify and apply the concepts of various aspects of the natural and physical world (Area 6).

### Area 1 - English (8 credit hours)

A grade of C or better in ENG 111 English I and ENG 112 English II is required for graduation with the AA degree.

### Area 2 – Literature and the Arts (9 credit hours)

Three courses, at least one of which is chosen from Art (ART 130 Appreciation of the Arts or ART 133 Art History I, ART 134 Art History II or ART 135 Art History III), Theatre (THE 130 Introduction to Theatre, THE 133 Script Analysis, THE 241 Theatre History I, THE 242 Theatre History II or THE 243 Theatre History III), Music (MUS 130 Music Appreciation); and at least one from those listed under English (other than English I and II, Technical Report Writing and Business Communications).

### Area 3 – Humanities (9 credit hours)

Three courses from those listed under History or Philosophy.

### Area 4 – Social Sciences (15 credit hours)

Five courses from at least two different disciplines including courses listed under Economics, Geography, Political Science, Psychology, Sociology and Regional Studies.

### Area 5 – Mathematics and Computers (6 credit hours)

Two courses including one from those listed under Mathematics (in the Transfer Module) and one from Information Technology Systems (at least 3 credit hours).\*

### Area 6 – Natural Sciences (12-15 credit hours)

Two options are available; choose the one most suited to your transfer institution.

#### Option 1

Take three courses, each from a different science area. (Possible classes include BIO 110, BIO 140, CHM 110, CHM 115, CHM 116, GLG 130, GLG 114, PHY 105, PHY 110 and PHY 120.)

#### Option 2

Take a three-course sequence in Biology, Chemistry, Geology or Physics. (Possible sequences include BIO 121-123, BIO 141-143, BIO 151-153, CHM 121-123, PHY 111-113, PHY 250-252, GLG 131-133)

### Concentration (15-20 credit hours)

These hours should be clearly transferable and count toward the major at the transfer institution. These classes relate to the major to be pursued at the four-year institution.\*

### Electives (15-17 credit hours)

These hours should be clearly transferable and count toward the major at the transfer institution. These hours should be planned carefully with an advisor. These classes may be used to support those listed under concentration hours, fulfill additional general education requirements or serve as free electives at the four-year institution.\*

### Global Awareness

In recognition of the growing importance of global awareness, the College also requires that students receiving the Associate of Arts degree take at least six courses with significant international content. Courses meeting the requirement begin on page 8.

### Capstone Seminar

All students pursuing either the AA or AS degree are required to take the Capstone Seminar (HUM 299). Students must have earned at least 60 credit hours prior to taking the course and must take the course for graduation. The course will assess student achievement of specific AA/AS program goals.

In addition to the Capstone Seminar, all students pursuing either the AA or AS degree are required to complete at least 9 credit hours in courses numbered 200 or higher. These classes will typically be in the Concentration or Elective areas, but may also fulfill requirements in Areas 2 - 6 above.

Total credit hours = 92

\*The number of credit hours and courses may vary with specific curriculum guides. Check with your advisor first.

### ASSOCIATE OF ARTS - TEACHER EDUCATION TRANSFER CONCENTRATION

The Associate of Arts Teacher Education Transfer Concentration is designed for students who plan to transfer into a Teacher Education (Middle Child or Adolescent/Young Adult) program at a four-year college or university. Students interested in Early Childhood or Early Elementary Education should consider the AAS degree in Early Childhood Education. Students seeking an AA, Teacher Education Concentration should plan the details of the program at Clark State according to the requirements of the individual transfer institution. Some of the schools to which students may choose to transfer includes: the University of Dayton, Urbana University, Wittenberg University, Wright State University, and Antioch University McGregor.

The program schedule that follows is designed for full-time students who have completed necessary prerequisites and have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Also, some four-year colleges and universities may accept more or fewer classes than are indicated in the sample schedule. Students should consult their academic advisors and their intended transfer institutions for help in planning their schedules.

#### Learning Outcomes

In addition to meeting the requirements and demonstrating the learning outcomes of the Associate of Arts degree, upon completion of the Teacher Education concentration, a graduate will be able to:

- demonstrate an understanding of child and human growth and development.
- promote child development and learning.
- display an appreciation and respect of diversity.

### Scholastic Preparation

Teacher Education students need a college-preparatory high school background. Four years each of English, mathematics, science and social studies is strongly recommended; foreign language is highly beneficial. Students with fewer classes in these areas may require college preparatory classes or other additional coursework at Clark State.

#### Degree Availability

Most classes for these concentrations are offered in the day and evening. Contact your academic advisor for course sequencing.

If you follow the recommended progression of courses listed below, most classes should transfer to most other institutions, but the transfer institutions make the final determinations in acceptance of credit.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ENG 111	English I	4
PSY 111	Psychology I	3
PHL 200	Critical Thinking	3
ITS 103	Information Technology Basics	3
--	Science*	4 - 5
<b>Winter</b>		
ENG 112	English II	4
PSY 112	Psychology II	3
PHL 210	Ethics	3
ART 130 or THE 130	Appreciation of the Arts or Introduction to Theatre	3
--	Science*	4 - 5
<b>Spring</b>		
COM 121	Public Speaking	3
SOC 110	Sociology	3
PSY 221^	Human Growth and Development	3
--	Science*	4 - 5
--	Concentration area elective, EDU course, other elective**	3 - 5
<b>Fall</b>		
ENG 230	Great Books	3
HST 111 or HST 112 or HST 113	Western Civilization	3
HST 121 or HST 122 or HST 123	American History	3
--	Concentration area elective, EDU course, other elective**	3 - 5
--	Concentration area elective, EDU course, other elective**	3 - 5



<b>Winter</b>		
STT 264	Statistics I	4
HST 111 or HST 112 or HST 113	Western Civilization (different number from above)	3
HST 121 or HST 122 or HST 123	American History (different number from above)	3
--	Concentration area elective, EDU course, other elective**	3 - 5
--	Concentration area elective, EDU course, other elective**	3 - 5
<b>Spring</b>		
HUM 299	Capstone Seminar	3
PSY 222^	Human Growth & Development II	3
--	Literature/Arts Elective ***	3
--	Concentration area elective, EDU course, other elective **	3 - 5
--	Concentration area elective, EDU course, other elective **	3 - 5
<b>Total Credit Hours</b>		<b>96</b>

**Requirements for graduation with Honors status:**

- Students must meet all requirements for the Associate of Arts degree.
- Required Courses\* (satisfy Arts & Humanities category of the Transfer Module):
  - ENG 231 Great Books of World Literature: Honors
  - HST 114 Western Civilization to the 14th Century: Honors
  - PHL 111 Problems in Philosophy: Honors
- Elective courses\* (must take 2 of 3)
  - HON 291: Science and Religion
  - HON 294: Science, Humanity, and Technology
  - HON 292: Literature, Gender, and Humanism
- Minimum grade of B required in each Honors course. Minimum overall GPA of 3.25 required.
- Students must indicate their intent to graduate with Honors status when petitioning to graduate with an Associate of Arts degree.

\*Prerequisites: HON and Honors sections of other courses are open to any student with a GPA of 3.25 who has successfully completed ENG 112.

\*Science classes chosen must meet either Option 1 or Option 2 in the AA degree, as listed on page 8. Select classes that are compatible with the degree plan at the intended transfer institution.

\*\*Specific classes will vary, depending on the age (Middle Child or Adolescent/Young Adult) and subject area (Language Arts, Math, Science or Social Studies) of the concentration. EDU 110 Introduction to Education, EDU 216 Technology for Educators and EDU 217 Individuals with Exceptionalities are strongly recommended classes for most transfer institutions. Please check with the transfer institution for specific guidelines. Qualified students may have earned Tech Prep credit for EDU 110, 216 or 217.

\*\*\* Literature/Arts electives may be found under category A of the Arts and Humanities portion of the Transfer Module, as listed on page 8.

^ Some transfer Institutions may accept PSY 223, Lifespan Growth and Development (5 cr hrs) as an alternate for PSY 221 and PSY 222

**ASSOCIATE OF ARTS - HONORS CONCENTRATION**

The purpose of the Honors Concentration AA degree at Clark State is to offer courses and recognition to students who seek a more comprehensive approach to their studies, with a more in-depth analysis and evaluation of course content within a seminar-style class setting.

The Honors Concentration emphasizes the Associate of Arts CORE outcomes of Reading, Writing, Critical Thinking and Diverse Perspectives. Each Honors course will be designated as meeting part of the Global Awareness requirement.

# Associate of Science

## ASSOCIATE OF SCIENCE

Four-year colleges and universities generally require that students spend a significant portion of their first two years taking courses that build their knowledge and skills in general education. A student with an AS degree may transfer these courses to a four-year institution. Of the 92 credit hours necessary to earn an AS degree at Clark State, a minimum of 59 credit hours must come from areas 1-6 in the outline of degree requirements. The AA/AS degree focuses on courses in the liberal arts and sciences.

The remaining credit hours are divided among courses in the student's area of concentration, elective courses and the Capstone Seminar. All entering students must take the Capstone Seminar in order to complete the AS degree.

The courses in the area of concentration as well as the electives should be directed toward the student's major at the transfer institution. These courses must be selected very carefully, following the recommendations of the transfer institution. Of the 30 hours in these two categories, no more than 15 should be selected from technical/career programs unless indicated in a curriculum guide or planned with an advisor with the division dean's approval.

Transfer institutions make the determination in acceptance of credit. The student should consult his/her academic advisor and the intended transfer institution when planning a schedule of classes. With careful scheduling and advising, a student should be able to transfer with junior standing, especially within the state of Ohio.

### Learning Outcomes

Upon completion of an associate degree in Associate of Science, a graduate will be able to:

- write clearly (Area 1).
- think critically (Area 1).
- critically analyze a work of literature, music, theatre, art, or architecture (Area 2).
- analyze and evaluate issues of the human historical and philosophical experience (Area 3).
- describe and assess divergent aspects of Individual and group human behavior (Area 4).
- demonstrate mathematical and computer literacy (Area 5).
- identify and apply the concepts of various aspects of the natural and physical world (Area 6).

### Area 1 - English (8 credit hours)

A grade of C or better in ENG 111 English I and ENG 112 English II is required for graduation with the AS degree.

### Area 2 - Literature and the Arts (6 credit hours)

Two courses, at least one of which is chosen from Art (ART

130 Appreciation of the Arts or ART 133 Art History I, ART 134 Art History II or ART 135 Art History III), Theatre (THE 105 Oral Interpretation, THE 130 Introduction to Theatre, THE 133 Script Analysis, THE 241 Theatre History I or THE 242 Theatre History II), THE 243 Theatre History III, or Music (MUS 130 Music Appreciation); and at least one from those listed under English (other than English I and II, Technical Report Writing and Business Communications).

### Area 3 - Humanities (6 credit hours)

Two courses from those listed under History or Philosophy.

### Area 4 - Social Sciences (15 credit hours)

Five courses from at least two different disciplines including courses listed under Economics, Geography, Political Science, Psychology, Sociology and Regional Studies.

### Area 5 - Mathematics and Computers (12 credit hours)

Four courses including three from those listed under Mathematics (in the Transfer Module) and one from Information Technology Systems (at least 3 credit hours).\*

### Area 6 - Natural Sciences (12-15 credit hours)

Two options are available; choose the one most suited to your major and the requirements of your transfer institution.

#### Option 1

Take three courses, each from a different science area. (Possible classes include BIO 110, BIO 140, CHM 110, CHM 115, CHM 116, GLG 130, GLG 114, PHY 105, PHY 110 and PHY 120.)

#### Option 2

Take a three-course sequence in Biology, Chemistry, Geology or Physics. (Possible sequences include BIO 121-123, BIO 141-143, BIO 151-153, CHM 121-123, PHY 111-113, PHY 250-252, GLG 131-133)

### Concentration (15-20 credit hours)

These hours should be clearly transferable and count toward the major at the transfer institution. These classes relate to the major to be pursued at the four-year institution.\*

### Electives (15-17 credit hours)

These hours should be clearly transferable and count toward the major at the transfer institution. These hours should be planned carefully with an advisor. These classes may be used to support those listed under concentration hours, fulfill additional general education requirements or serve as free electives at the four-year institution.\*

### Global Awareness

In recognition of the growing importance of global awareness, the College also requires that students receiving the Associate of Science degree take at least six courses with significant international content. Courses meeting the requirement begin on page 8.

### **Capstone Seminar**

All students pursuing either the AA or AS degree are required to take the Capstone Seminar (HUM 299). Students must have earned at least 60 credit hours prior to taking the course and must take the course for graduation. The course will assess student achievement of specific AA/AS program goals.

In addition to the Capstone Seminar, all students pursuing either the AA or AS degree are required to complete at least 9 credit hours in courses numbered 200 or higher. These classes will typically be in the Concentration or Elective areas, but may also fulfill requirements in Areas 2 - 6 above.

Total credit hours = 92

\*The number of credit hours and courses may vary with specific curriculum guides. Check with your advisor first.

### **ASSOCIATE OF SCIENCE - HONORS CONCENTRATION**

The purpose of the Honors Concentration AS degree at Clark State is to offer courses and recognition to students who seek a more comprehensive approach to their studies with a more in-depth analysis and evaluation of course content within a seminar-style class setting.

The Honors Concentration emphasizes the Associate of Science CORE outcomes of Reading, Writing, Critical Thinking and Diverse Perspectives. Each Honors course will be designated as meeting part of the Global Awareness requirement.

#### **Requirements for graduation with Honors status:**

- Students must meet all requirements for the Associate of Science degree.
- Required Courses\* (satisfy Arts & Humanities category of the Transfer Module):
  - ENG 231 Great Books of World Literature: Honors
  - HST 114 Western Civilization to the 14th Century: Honors
  - PHL 111 Problems in Philosophy: Honors
- Elective courses\* (must take 2 of 3)
  - HON 291: Science and Religion
  - HON 294: Science, Humanity, and Technology
  - HON 292: Literature, Gender, and Humanism
- Minimum grade of B required in each Honors course. Minimum overall GPA of 3.25 required.
- Students must indicate their intent to graduate with Honors status when petitioning to graduate with an Associate of Science degree.

\*Prerequisites: HON and Honors sections of other courses are open to any student with a GPA of 3.25 who has successfully completed ENG 112.

# Business Transfer-Wright State University

## BUSINESS TRANSFER

The Business Transfer program is a calculus-based curriculum that will prepare a student to transfer into the Raj Sooin College of Business at Wright State University. This selection of courses is designed to allow a student to enter the College of Business with junior status upon completion, provided the student has maintained a GPA of 2.5 or higher.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory education recommendations. Some individuals, especially part-time students and those taking college preparatory education courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an associate degree in pre-business, a graduate will be able to meet the goals outlined for the general associate of science degree; additionally, the student will be able to demonstrate awareness of:

- the role of the business person in society.
- the rapidly changing global business environment.

### Scholastic Preparation

Students entering this program should have taken mathematics courses each year of high school. Students who do not test into MTH 121, College Algebra I, will need to take the necessary prerequisite mathematics courses before beginning the mathematics sequence.

Course #	Course Title	Credit Hours
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#### Fall

ENG 111	English	4
ACC 111	Accounting I	4
HST 111	Western Civilization to the 14th Century	3
STT 264	Statistics I	4
ITS 12A	Windows Concepts	2
ITS 12W	Beginning Word Processing	1

#### Winter

ENG 112	English II	4
ACC 112	Accounting II	4
STT 265	Statistics II	4
HST 112	Western Civilization through 18th Century	3
ITS 12D	Beginning Database	1
ITS 12P	Beginning Presentation	1
ITS 12S	Beginning Spreadsheet	1

#### Spring

ENG 221	Business Communication	3
ACC 113	Accounting III	4
SOC 110	Sociology	3
PSY 111	Psychology I	3
RST **	Regional Studies	3
COM 121	Public Speaking	3

#### Fall

ECO 221	Principles of Macroeconomics	3
MTH 121	College Algebra I	3
BIO 141	Evolution, Diversity and Ecology*	OR
GLG 131	Physical Geology*	5
PSY 112	Psychology II	3
ENG 230	Great Books: World Literature	3

#### Winter

MTH 220	Calculus for Mgt., Life, Social Sciences	5
ECO 222	Principles of Microeconomics	3
MKT 200	Principles of Marketing	4
BIO 142	The Human Organism	OR
GLG 132	Historical Geology	5
MGT 260	Legal Environment of Business	3

#### Spring

HUM 299	Capstone	3
BIO 143	Cell Biology/Genetics	
OR		
GLG 133	Environmental Geology	5
ART 130	Appreciation of the Arts	3
PLS 110	American National Government	3
STT 275	Business Statistics	4

Total Credit Hours 110

\*Students should complete either all three BIO courses or all three GLG courses.

\*\*Choose from Regional Studies: 260: Asia-China, Regional Studies: 262: North India, Regional Studies: 270: Africa, or Regional Studies: 280: Latin America

# Career and Technical Education-ATS

## CAREER AND TECHNICAL EDUCATION-ATS

### Degree Requirement for Route B Career-Technical License

In 2004, the Ohio Department of Education recommended amending Chapter 3301-24-08 of the Teacher Education and Licensure Standards, Professional or Associate License Renewal. This recommendation resulted in a change regarding Route B career-technical licenses. This rule states that the second renewal of the professional career-technical license obtained pursuant to the provisions in paragraph (D) (7) of Rule 3301-24-05 of the Administrative Code shall require completion of a degree applicable to the career field, classroom teaching, or area of licensure. The second renewal of a Route B career-technical license, therefore, requires that the applicant hold at least an Associate Degree. This rule applies to all first Route B Licensures issued after December 30, 2004.

To help you meet this requirement, Clark State Community College has developed an Associate of Technical Studies (ATS) degree specializing in career-technical education. This ATS degree was designed specifically for Career and Technical educators who currently have a Route B career-technical license, so completing the program is easy!

- Utilize your technical work experience
- Transfer in professional career-technical teacher education coursework
- Complete general education coursework through Clark State

All Clark State coursework can be completed online or at one of our three campus locations in Springfield, Beavercreek and Bellefontaine.

### Curriculum

- Basic Requirement: Technical work-based experience credit: 21 quarter hour credits based on documentation of Ohio Route B Licensure.
- Technical Requirement: A combination of Professional Teacher Education coursework transferred from ODE approved institutions and
- MGT 200 Introduction to Project Management (4 credit hours)
- COM 121 Public Speaking (3 credit hours) to a total of 46 credit hours.
- CSCC General Education coursework: 23 quarter hour credits including:

Course #	Course Title	Credit Hours
ENG 111	English I	4
ENG 112	English II	4
ENG223	Technical Report Writing	3
OR		
ENG 221	Business Communications	3
	Social Science Elective	3
	Humanities Elective	3
	Humanities Elective	3
Total Credit Hours		90

- \*At least 30 quarter hours must be completed at Clark State.
- \*\*At least one of the four humanities/social science courses must contain global awareness and diversity components. These courses have a (GA) after their listing in the catalog.
- \*\*\*If the combination of education credits transferred in and MGT 200 and COM 121 do not total 46 quarter credit hours, the student will need to have additional technical credits approved by his/her advisor to meet the 46-credit-hour minimum.

# Computer Networking

## COMPUTER NETWORKING

Information Technology is one of the fastest-growing career fields today. The Computer Networking curriculum prepares students to plan, design, implement, troubleshoot and administer micro-computer-based networks. The curriculum allows students to customize their program by choosing areas of concentration during the second year. The areas of concentration can be found following the Computer Networking curriculum page. Please discuss with your academic advisor which concentrations are best for meeting your career goals. This curriculum can assist students in preparing for the following certifications: CompTIA (A+, Network+, Linux+, Security+, Project+); Microsoft Certified Professional, Cisco Certified Network Associate and Oracle Certified Administrator.

Computer Networking students can increase their learning (and earning) potential by participating in the cooperative education work-experience program. Through this program, students can spend up to two quarters working in the information technology field while earning college credits. Interested students should contact their academic advisor or the Office of Career Management for more information. The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Computer Networking, a graduate will be able to:

- demonstrate knowledge of computer terms and concepts.
- troubleshoot basic desktop and server hardware and operating system problems.
- install, manage and configure network operating systems. (Administration concentration)
- install, manage and configure database management systems. (Oracle Database concentration)
- implement LAN/WAN infrastructure technologies. (Infrastructure concentration)
- implement network security technologies. (CyberSecurity concentration)

### Scholastic Preparation

Computer Networking students need a high school algebra background equivalent to CPE 101 (Introduction to Algebra). Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

### Degree Availability

These programs are available during the day and evening. Contact your academic advisor about evening curriculum guides.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
NTK 176	PC/Network Essentials I	6
ACC 111	Principles of Accounting I	4
MGT 105	Contemporary American Business	3
ENG 111	English I	4
<b>Winter</b>		
NTK 178	PC/Network Essentials II	6
ENG 112	English II or	
ENG 135	Business Report Writing****	4
MGT 200	Project Management	4
--	Humanities/Social Science Elective (GA)	3
<b>Spring</b>		
NTK 179	PC Network Essentials III	6
ENG 221	Business Communication	3
ITS 125	Beginning Spreadsheet	1
--	Management/Marketing/Accounting Elective***	3
--	Social Science Elective	3
<b>Fall</b>		
NTK -	Concentration A, Course 1*	5
NTK -	Concentration B, Course 1*	5
NTK -	NTK/CSD or Co-op Elective(s) **	5
--	Humanities/Social Science Elective	3
<b>Winter</b>		
NTK -	Concentration A, Course 2*	5
NTK -	Concentration B, Course 2*	5
NTK -	NTK/CSD or Co-op Elective(s)**	5
COM 121	Public Speaking	3
<b>Spring</b>		
NTK -	Concentration A, Course 3*	5
NTK -	Concentration B, Course 3*	5

NTK -	NTK/CSD/ITS or Co-op Elective(s)**	3
NTK 288	Advanced Networking Topics	5
	<b>Total Credit Hours</b>	<b>104</b>

\*Choose any two concentrations from CyberSecurity, Network Administration, Network Infrastructure, Oracle Database Management

\*\*NTK/CSD elective hours must total a minimum of 13 hours. Cooperative Education courses (EBE 100, EBE 282, EBE 283, EBE 284, EBE 292, EBE 293 and EBE 294) can be applied in place of NTK/CSD elective hours. ITS electives cannot include ITS 080, ITS 081.

\*\*\*Any MGT, MKT or ACC course not already prescribed.

\*\*\*\*ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

## CONCENTRATIONS FOR COMPUTER NETWORKING

### CyberSecurity Concentration

This concentration focuses on preparing students to manage and implement computer and network-based security technologies. Designing, implementing and maintaining secure computer-based systems are components of this concentration.

MGT 211	CyberSecurity Management I	5
MGT 212	CyberSecurity Management II	5

Plus at least one of the following:

NTK 245	CyberSecurity - OS & Networks	5
NTK 246	CyberSecurity - Firewall Technologies	5
NTK 247	CyberSecurity - Forensic Analysis	5

### Network Administration Concentration

This concentration focuses on preparing students for managing and maintaining desktop and server operating systems software. Installing, configuring and troubleshooting operating systems are components of this concentration.

NTK 270	Administering Microsoft Professional	5
NTK 272	Administering Microsoft Server	5
NTK 240	Linux/Unix Network Administration I	5

### Network Infrastructure Concentration

This concentration focuses on preparing students to implement and support the computer network infrastructure. Setting up and configuring routers and switches is a key component of this concentration.

NTK 201	Cisco Associate I	5
NTK 202	Cisco Associate II	5
NTK 203	Cisco Associate III	5

## Oracle Database Management Concentration

This concentration focuses on preparing students to manage and maintain the Oracle Database software. Installing, configuring and implementing a database system are key components of this concentration.

NTK 255	Introduction to Oracle	5
NTK 256	Oracle Fundamentals I	5
NTK 257	Oracle Database Mining and Warehousing	5

## ADVANCED COMPUTER NETWORKING OPTION

Information technology is one of the fastest-growing career fields today. The Advanced Computer Networking curriculum prepares students to plan, design, implement, troubleshoot and manage advanced networking technologies. The curriculum allows students to customize their program by choosing areas of concentration during the second year. The areas of concentration can be found on the page following the Computer Networking curriculum in this section. Students should discuss with their academic advisor which concentrations are best for meeting their career goals.

This curriculum can assist students in preparing for the following certifications: CompTIA (Linux+, Security+, Project+), Microsoft Certified Professional, Cisco Certified Network Associate and Oracle Certified Administrator.

Advanced Computer Networking students can increase their learning (and earning) potential by participating in the cooperative education work experience program. Through this program, students can spend up to two quarters working in the information technology field while earning college credits. Interested students should contact their academic advisor or the Office of Career Management for more information.

The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Advanced Computer Networking, a graduate will be able to:

- implement LAN/WAN infrastructure technologies.
- install, manage and configure network operating systems. (Administration concentration)
- install, manage and configure database management systems. (Oracle Database concentration)
- implement network security technologies. (CyberSecurity concentration)

### Prerequisite Requirements

Prior to selecting this program, students must demonstrate basic computer networking knowledge by meeting one of the following criteria:

- The student must have completed training in and/or passed two of the following certifications: A+, Network+, Server+, Linux+.
- The student must have completed training in and/or passed one of the following certifications: MCSA/MCSE, CNA/CNE or other intermediate/ advanced networking certification.
- The student must demonstrate equivalent work experience knowledge/skill.

### Scholastic Preparation

Advanced Computer Networking students need a high school algebra background equivalent to CPE 101 Introduction to Algebra. Students without adequate keyboarding skills should enroll in ITS 12K Keyboarding/Word Processing.

### Degree Availability

These programs are available during the day and evening. Contact your academic advisor about evening curriculum guides.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
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#### Fall

NTK 201	Cisco Associate I	5
ACC 111	Principles of Accounting I	4
MGT 105	Contemporary American Business	3
ENG 111	English I	4

#### Winter

NTK 202	Cisco Associate II	5
ENG 112	English II or	
ENG 135	Business Report Writing***	4
MGT 200	Project Management	4
- -	Humanities/Social Science Elective	3

#### Spring

NTK 203	Cisco Associate III	5
ENG 221	Business Communication	3

ITS 125	Beginning Spreadsheet	1
- -	Management/Marketing/Accounting Elective***	3
- -	Social Science Elective	3

#### Fall

NTK -	Concentration A, Course 1*	5
NTK -	Concentration B, Course 1*	5
NTK -	NTK/CSD or Co-op Elective(s) **	5
- -	Humanities/Social Science Elective (GA)	3

#### Winter

NTK -	Concentration A, Course 2*	5
NTK -	Concentration B, Course 2*	5
NTK -	NTK/CSD or Co-op Elective(s)**	5
COM 121	Public Speaking	3

#### Spring

NTK -	Concentration A, Course 3*	5
NTK -	Concentration B, Course 3*	5
NTK -	NTK/CSD/ITS or Co-op Elective (s)**	3
NTK 288	Advanced Networking Topics	5

Total Credit Hours 101

\*Choose any two concentrations from CyberSecurity, Network Administration, Oracle Database Management (see concentrations on earlier page).

\*\*NTK/CSD elective hours must total a minimum of 13 hours. Cooperative Education courses (EBE 100, EBE 282, EBE 283, EBE 284, EBE 292 EBE 293, and EBE 294) can be applied in place of NTK/CSD elective hours. ITS electives cannot include ITS 080, ITS 081.

\*\*\*Any MGT, MKT or ACC course not already prescribed.

\*\*\*\*ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

### CYBERSECURITY SPECIALIST OPTION

Information technology is one of the fastest-growing career fields today. The CyberSecurity Option curriculum prepares students to design, implement, manage and maintain computer and network-based security technologies. The curriculum allows students to customize their program by choosing one area of concentration during the second year. The areas of concentration can be found on the page following the Computer Networking curriculum in this section. Please discuss with your academic advisor which concentration is best for meeting your career goals. This curriculum can assist students in preparing for the following certifications: CompTIA (A+, Network+, Linux+, Security+, Project+); Microsoft Certified Professional, Cisco Certified Network Associate and Oracle Certified Administrator.

Computer Networking students can increase their learning (and earning) potential by participating in the cooperative education work-experience program. Through this program,



students can spend up to two quarters working in the information technology field while earning college credits. Interested students should contact their academic advisor or the Office of Career Management for more information. The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

**Learning Outcomes**

Upon completion of an Associate of Applied Business degree in CyberSecurity Specialist, a graduate will be able to:

- demonstrate knowledge of computer terms and concepts.
- troubleshoot basic desktop and server hardware and operating system problems.
- implement network security technologies.
- install, manage and configure network operating systems. (Administration concentration)
- install, manage and configure database management systems. (Oracle Database concentration)
- implement LAN/WAN infrastructure technologies. (Infrastructure concentration)

**Scholastic Preparation**

Computer Networking students need a high school algebra background equivalent to CPE 101 (Introduction to Algebra). Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

**Degree Availability**

These programs are available during the day and evening. Contact your academic advisor about evening curriculum guides.

**Transfer Options**

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

**Humanities/Social Science Electives**

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
NTK 176	PC/Network Essentials I	6
ACC 111	Principles of Accounting I	4
MGT 105	Contemporary American Business	3
ENG 111	English I	4
<b>Winter</b>		
NTK 178	PC/Network Essentials II	6
ENG 112	English II or	
ENG 135	Business Report Writing****	4
MGT 200	Project Management	4
--	Humanities/Social Science Elective (GA)	3
<b>Spring</b>		
NTK 179	PC Network Essentials III	6
ENG 221	Business Communication	3
ITS 12S	Beginning Spreadsheet	1
--	Management/Marketing/Accounting Elective***	3
--	Social Science Elective	3
<b>Fall</b>		
NTK -	Concentration A, Course 1*	5
MGT 211	CyberSecurity Management I*	5
NTK 225	Wireless Networking	5
--	Humanities/Social Science Elective	3
<b>Winter</b>		
NTK -	Concentration A, Course 2*	5
MGT 212	CyberSecurity Management II	5
NTK 245	CyberSecurity - OS and Networks**	5
COM 121	Public Speaking	3
<b>Spring</b>		
NTK -	Concentration A, Course 3*	5
NTK 246	CyberSecurity - Firewall Techs**	5
NTK 247	CyberSecurity - Forensic Analysis**	5
NTK 288	Advanced Networking Topics	5
<b>Total Credit Hours</b>		<b>106</b>

\*Choose any one concentration from Network Administration, Network Infrastructure, Oracle Database (see concentrations on earlier page).

\*\*Students may substitute EBE 100 and EBE 283 for NTK 245 or NTK 246 or NTK 247.

\*\*\*Any MGT, MKT or ACC course not already prescribed.

\*\*\*\*ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

## TECHNICAL SYSTEMS SUPPORT OPTION

Information Technology is one of the fastest-growing career fields today. The Technical System Support curriculum prepares students to support computer and network end-users. The curriculum allows students to customize their program by choosing one area of concentration during the second year. The areas of concentration can be found on the page following the Computer Networking curriculum in this section. Students should discuss with their academic advisor which concentrations are best for meeting their career goals.

This curriculum can assist students in preparing for the following certifications: CompTIA (Network+, Linux+, Security+, Project+); Microsoft Certified Professional, Cisco Certified Network Associate and Oracle Certified Administrator.

Technical Systems Support students can increase their learning (and earning) potential by participating in the cooperative education work experience program. Through this program, students can spend up to two quarters working in the information technology field while earning college credits. Interested students should contact their academic advisor or the Director of Career Management for more information.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Technical Systems Support, a graduate will be able to:

- demonstrate knowledge of computer terms and concepts.
- troubleshoot basic desktop and server hardware and operating system problems.
- use and troubleshoot basic application software.
- install, manage and configure network operating systems. (Administration concentration)
- install, manage and configure database management systems. (Oracle Database concentration)
- implement LAN/WAN infrastructure technologies. (Infrastructure concentration)
- implement network security technologies. (CyberSecurity concentration)

### Scholastic Preparation

Technical Support students need a high school algebra background equivalent to CPE 101 Introduction to Algebra. Students with little or no computer background should enroll in ITS 080 Computer Fundamentals as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K Keyboarding/Word Processing.

## Degree Availability

These programs are available during the day and evening. Contact your academic advisor about evening curriculum guides.

## Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

## Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
NTK 176	PC/Network Essentials I	6
ACC 111	Principles of Accounting I	4
MGT 105	Contemporary American Business	3
ENG 111	English I	4
<b>Winter</b>		
NTK 178	PC/Network Essentials II	6
ENG 112	English II or	
ENG 135	Business Report Writing****	4
MGT 200	Project Management	4
--	Humanities/Social Science Elective	3
<b>Spring</b>		
NTK 179	PC/Network Essentials III	6
ENG 221	Business Communication	3
ITS 125	Beginning Spreadsheet	1
--	Management/Marketing/	
--	Accounting Elective***	3
--	Social Science Elective	3
<b>Fall</b>		
NTK -	Concentration A, Course 1*	5
NTK -	NTK/CSD or Co-op Elective(s)**	5
ITS 12A	Windows Concepts	2
ITS 12D	Beginning Database	1
ITS 12W	Beginning Word Processing	1
ITS -	ITS Elective*****	1
--	Humanities/Social Science Elective (GA)	3
<b>Winter</b>		
NTK -	Concentration A, Course 2*	5
NTK -	NTK/CSD or Co-op Elective(s)**	5
COM 121	Public Speaking	3
ITS 14D	Intermediate Database	2
ITS -	ITS Elective*****	1

### Spring

NTK -	Concentration A, Course 3*	5
NTK 288	Advanced Networking Topics	5
NTK -	NTK/CSD or Co-op Elective(s)	3
ITS 14W	Intermediate Word Processing	2
ITS -	ITS Elective(s)*****	3

Total Credit Hours 102

\*Choose any one concentration from CyberSecurity, Network Administration, Network Infrastructure, Oracle Database (see concentrations on earlier page).

\*\*NTK/CSD elective hours must total a minimum of 13 hours. Cooperative Education courses (EBE 100, EBE 282, EBE 283, EBE 284, EBE 292, EBE 293, and EBE 294) can be applied in place of NTK/CSD elective hours. ITS electives cannot include ITS 080, ITS 081.

\*\*\*Any MGT, MKT or ACC course not already prescribed.

\*\*\*\*ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

\*\*\*\*\*ITS electives must total a minimum of 5 hours. ITS courses may not include ITS 080, ITS 081, ITS 102, ITS 103.

### COMPUTER NETWORKING DEPARTMENTAL CERTIFICATES

A number of departmental certificates are offered in Information Technology and are designed for individuals working in the field who may wish to upgrade their skills. Students who have little or no computer background are cautioned that these certificates may not provide the necessary information technology skills for them to achieve their goals. All coursework completed is applicable to the appropriate associate degree program. These certificates can be applied for by filling out the certificate application form in the Business and Applied Technologies Division Office in the Brinkman Educational Center.

### CYBERSECURITY CERTIFICATE

This certificate is focused on providing the knowledge and skills necessary to design, implement, manage and maintain computer and network-based security technologies.

Course #	Course Title	Credit Hours
NTK 176	PC/Network Essentials I	6
NTK 178	PC/Network Essentials II	6
NTK 179	PC Network Essentials III	6
MGT 211	CyberSecurity Management I	5
MGT 212	CyberSecurity Management II	5
NTK 245	CyberSecurity - OS & Networks	5
NTK 246	CyberSecurity - Firewall Technologies	5
NTK 247	CyberSecurity - Forensic Analysis	5
Total Credit Hours		43

### NETWORK ADMINISTRATION CERTIFICATE

This certificate is focused on providing the knowledge and skills necessary to install, configure and administer a variety of network operating systems and services.

Course #	Course Title	Credit Hours
NTK 176	PC/Network Essentials I	6
NTK 178	PC/Network Essentials II	6
NTK 179	PC Network Essentials III	6
NTK 270	Administering Microsoft Professional	5
NTK 272	Administering Microsoft Server	5
NTK 240	Linux/Unix Administration I	5
Total Credit Hours		33

### NETWORK INFRASTRUCTURE CERTIFICATE

This certificate is focused on providing the knowledge and skills necessary to design, configure, install and manage a computer network infrastructure.

Course #	Course Title	Credit Hours
NTK 176	PC/Network Essentials I	6
NTK 178	PC/Network Essentials II	6
NTK 179	PC/Network Essentials III	6
NTK 201	Cisco Associate I	5
NTK 202	Cisco Associate II	5
NTK 203	Cisco Associate III	5
Total Credit Hours		33

### ORACLE DATABASE MANAGEMENT CERTIFICATE

This certificate is focused on providing the knowledge and skills necessary to configure and administer an Oracle database management system.

Course #	Course Title	Credit Hours
NTK 176	PC/Network Essentials I	6
NTK 178	PC/Network Essentials II	6
NTK 179	PC/Network Essentials III	6
NTK 255	Introduction to Oracle	5
NTK 256	Oracle Administration I	5
NTK 257	Oracle Data Mining and Warehousing	5
Total Credit Hours		33

## TECHNICAL SUPPORT CERTIFICATE

This certificate is focused on providing the knowledge and skills necessary to support computer and network end-users and support desktop application software.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
NTK 176	PC/Network Essentials I	6
NTK 178	PC/Network Essentials II	6
NTK 179	PC/Network Essentials III	6
ITS 12A	Window Concepts	2
ITS 12D	Beginning Database	1
ITS 14D	Intermediate Database	2
ITS 12S	Beginning Spreadsheet	1
ITS 14S	Intermediate Spreadsheet	2
ITS 12W	Beginning Word Processing	1
ITS 14W	Intermediate Word Processing	2
ITS - ITS	Elective(s)*	7
	<b>Total Credit Hours</b>	<b>36</b>

\* ITS 080, ITS 081, ITS 12K, ITS 102, and ITS 103 cannot be used as electives.

# Computer Software Development

## COMPUTER SOFTWARE DEVELOPMENT

Information technology is one of the fastest-growing career fields today. The Computer Software Development curriculum prepares the students to analyze, design and develop solutions to business problems through the use of technology. Students learn and work with a variety of popular programming languages and industry-standard development tools, as well as database management tools. Object-oriented and client-server application environments are used. Students will work within a variety of operating system environments. Specific attention will be paid to the Web Services programming model.

Computer Software Development students can increase their learning (and earning) potential by participating in the cooperative education work-experience program. Through this program, students can spend up to two quarters working in the information technology field while earning college credits. Interested students should contact their academic advisor or the Director of Career Management for more information.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Computer Software Development, a graduate will be able to:

- critically analyze information system requirements.
- build traditional and object-oriented information system models.
- write computer programs to implement information system designs.
- model business data requirements.
- develop back-end relational databases.
- design and create websites.

### Scholastic Preparation

Computer Software Development students need a high school algebra background equivalent to CPE 101 Introduction to Algebra. Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

### Degree Availability

The first year of this program is available during the day and evening. Many of the second-year courses are only available in the evening. Contact your academic advisor about course sequencing.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
CSD 105	Programming Fundamentals	4
COM 121	Public Speaking	3
ENG 111	English I	4
ITS 12A	Windows Concepts	2
ITS 12S	Beginning Spreadsheet	1
MGT 105	Contemporary American Business	3
<b>Winter</b>		
CSD 121	Visual Basic Programming I	4
ENG 112	English II or	
ENG 135	Business Report Writing**	4
ITS 12D	Beginning Database	1
ITS 115	HTML and XHTML	4
PHL 205	Deductive Logic	3
--	Social Science Elective	3
<b>Spring</b>		
CSD 122	Visual Basic Programming II	4
CSD 140	Database Design and Implementation	5
CSD 145	UNIX Concepts	4
ITS 118	XML Web Services	4
<b>Fall</b>		
CSD 150	Database Administration	5
CSD 224	Java Concepts I	4
CSD-	CSD or NTK Elective, or MGT 115	3
ENG 221	Business Communication	3
ITS 230	Introduction to Web Design	3
<b>Winter</b>		
CSD 220	Systems Analysis	4
CSD 225	Java Concepts II	4
CSD	CSD, EBE, or NTK Elective*	3
ITS 231	Web Page Multimedia	3
MGT 106	Organizational Behavior	4

## Spring

CSD 160	Database Design	5
CSD 222	Systems Design	4
CSD 270	Creating and Publishing Websites	4
CSD-	CSD, EBE, ITS, or NTK Elective*	3
COM 111	Interpersonal Communication	3
Total Credit Hours		108

\* EBE 110, ITS 080, ITS 081, ITS 12K, ITS 102 cannot be used as electives. CSD elective hours must total a minimum of 9 hours.

\*\* ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

## COMPUTER SOFTWARE DEVELOPMENT DEPARTMENTAL CERTIFICATES

A number of departmental certificates are offered in Information Technology and are designed for individuals working in the field who may wish to upgrade their skills. Students who have little or no computer background are cautioned that these certificates may not provide the necessary information technology skills for them to achieve their goals. All course work completed is applicable to the appropriate associate degree program. These certificates can be applied for by filling out the certificate application form in the Business and Applied Technologies Division Office in the Brinkman Educational Center.

## COMPUTER SOFTWARE DEVELOPMENT/ PROGRAMMING CERTIFICATE

This certificate provides the knowledge and skills necessary to design and develop computer software applications. Programming languages will include both procedural and object-oriented methodologies.

Course #	Course Title	Credit Hours
CSD 105	Programming Fundamentals	4
CSD 121	Visual Basic Programming I	4
CSD 122	Visual Basic Programming II	4
CSD 140	Database Design and Implementation	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
CSD 224	Java Concepts I	4
CSD 225	Java Concepts II	4
ITS 115	HTML and XHTML	4
ITS 118	XML Web Services	4
Total Credit Hours		43

## MICROSOFT DATABASE ADMINISTRATION/ PROGRAMMING CERTIFICATE

This certificate is mapped to the MCDBA certification and focuses on the programming track.

Course #	Course Title	Credit Hours
CSD 105	Programming Fundamentals	4
CSD 121	Visual Basic Programming I	4
CSD 122	Visual Basic Programming II	4
CSD 140	Database Design and Implementation	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
ITS 115	HTML and XHTML	4
ITS 118	XML Web Services	4
NTK 270	Administering Microsoft Professional	5
NTK 272	Administering Microsoft Server	5
Total Credit Hours		45

## SYSTEMS ANALYSIS CERTIFICATE

This certificate provides the knowledge and skills necessary to analyze and develop business information systems. Both traditionally structured procedural methodologies and object-oriented methodologies will be included.

Course #	Course Title	Credit Hours
CSD 105	Programming Fundamentals	4
CSD 140	Database Design and Implementation	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
CSD 220	Systems Analysis	4
CSD 222	Systems Design	4
MGT 200	Introduction of Project Management	4
Total Credit Hours		31

## WEB SERVICES CERTIFICATE

The focus of this certificate is to provide the knowledge and skills necessary to develop web applications and e-business systems.

Course #	Course Title	Credit Hours
CSD 105	Programming Fundamentals	4
CSD 106	Introduction to Scripting Languages	4
CSD 140	Database Design and Implementation	5
CSD 224	Java Concepts I	4
CSD 225	Java Concepts II	4
CSD 270	Creating and Publishing Web Sites	4
ITS 115	HTML and XHTML	4
ITS 118	XML Web Services	4
ITS 230	Introduction to Web Design	3
ITS 231	Web Page Multimedia	3
Total Credit Hours		39

# Criminal Justice

## BASIC PEACE OFFICER TRAINING ACADEMY

Clark State Community College, in cooperation with local law enforcement agencies, the State of Ohio and the Ohio Peace Officers' Training Commission, offers the Basic Peace Officer Training Academy. This is the state certifying academy mandated by the Ohio Peace Officer Training Commission.

The objective of the academy is to provide the recruit with the basic fundamentals of entry-level peace officer training. Academy applicants must meet stringent entrance requirements as directed by the Attorney General of the State of Ohio.

Formal class meetings for this academy may be held on the Clark State Campus or at a satellite location. Firearms training is conducted at both indoor and outdoor ranges at off-campus locations.

Recruits successfully completing this academy will earn some college credit toward a Criminal Justice Technology degree as well as the opportunity to sit for the state certification examination. Basic Peace Officer Training topics include administration, legal, human relations, firearms, driving, traffic accidents, investigation, patrol, traffic enforcement, civil disorders, unarmed self-defense, first aid and physical conditioning.

Course #	Course Title	Credit Hours
CRJ 287	Basic Law Enforcement I	8
CRJ 289	Basic Law Enforcement II	8
Total Credit Hours		16

## CORRECTIONS

Few careers in public service offer more challenge and variety to men and women than criminal justice.

The Corrections degree program offers the student a broad overview of the correctional system. The program prepares students for immediate employment in federal, state and local correctional facilities. Graduates may expect to qualify for entry-level positions as corrections officers, parole officers, and probation officers, as well as investigators and youth counselors.

The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking developmental courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

## Learning Outcomes

Upon completion of an associate degree in Corrections, a graduate will be able to:

- demonstrate the ability to use the on-campus email program by receiving, sending and attaching files to email.
- demonstrate competency by writing an incident report using acceptable college-level vocabulary, grammar and punctuation as appropriate in a correctional facility.
- demonstrate the ability to work and participate in small group projects.
- demonstrate the ability to identify a community problem and suggest a solution using critical thinking skills.
- demonstrate the ability to make a law enforcement oral presentation before an audience.
- demonstrate competency by working at a prison and performing as a professional in that arena.

## Prerequisites

Anyone considering a law enforcement career should recognize that employment involves meeting physical requirements, which vary greatly among different agencies.

A conviction of any of the below crimes is a disqualifier for this program:

- any felony
- domestic violence or reduced charge stemming from a domestic violence incident

Any questions should be directed to the Program Coordinator.

## Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
CRJ 100	Intro to Criminal Justice	4
CRJ 116	Systems Approach to Computer Technology	3
COR 100	Intro to Corrections	4
ENG 111	English I	4
SWK 105	Chemical Dependency I	4
<b>Winter</b>		
CRJ 120	Juvenile Procedures	3
COR 105	Probation and Parole	4
ENG 112	English II	4
MTH 106	Business Math	3
PSY 111	Psychology I	3
<b>Spring</b>		
CRJ 125	Community Policing	3
COM 111	Interpersonal Communication	3

COR 130	Adult/Juvenile Corrections	4
ENG 223	Technical Report Writing	3
SOC 110	Sociology	3
SOC 240	Racial and Cultural Minorities	3

**Fall**

COR 280	Jail Practicum	4
PHL 240	Philosophy of World Religions	3
PLS 220	Constitutional Law	3
PSY 230	Abnormal Psychology	3

**Winter**

CRJ 226	Interview and Interrogation	3
CRJ 228	Criminal Investigations	3
CRJ 231	Criminal Law	3
COR 281	Juvenile Institutions Practicum	4

**Spring**

CRJ 230	Social Justice	3
CRJ 250	Community Resources	3
COR 282	Adult Institutions Practicum	4

Total Credit Hours 91

- demonstrate competency by writing an incident report using acceptable college-level vocabulary, grammar and punctuation as appropriate in the criminal justice field.
- demonstrate the ability to work and participate in small group projects.
- demonstrate the ability to identify a community problem and suggest a solution through critical thinking skills.
- demonstrate the ability to make a law enforcement oral presentation before an audience.
- demonstrate competency by working at a police agency and performing as a professional in that arena.

**Prerequisites**

Anyone considering a law enforcement career should recognize that employment involves meeting physical requirements, which vary greatly among different agencies.

A conviction of any of the below crimes is a disqualifier for this program:

- any felony
- domestic violence or reduced charge stemming from a domestic violence incident

**CRIMINAL JUSTICE TECHNOLOGY**

The Criminal Justice program provides students with a contemporary curriculum. The program is responsive to our ever-changing society, which demands highly-educated and well-qualified candidates to meet the increasing standards of a variety of peace officer agencies.

Opportunities are plentiful in the criminal justice system in sheriffs' departments, municipal police departments, the state highway patrol, corrections agencies and other public and private agencies.

The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Students completing the Clark State AAS degree in Criminal Justice, with additional courses of COR 100 and either COR 281 or 282, may transfer into the BS in Criminal Justice Leadership at Urbana University. Sixty semester credits (equivalent to 90 quarter credits) at Urbana are required to complete the BS degree.

**Learning Outcomes**

Upon completion of an associate degree in Criminal Justice, a graduate will be able to:

- demonstrate the ability to use the on-campus e-mail program by receiving, sending and attaching files to e-mail.

Any questions should be directed to the program coordinator.

**Humanities/Social Science Electives**

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
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**Fall**

CRJ 100	Intro to Criminal Justice	4
CRJ 112	Traffic Management	3
CRJ 116	Systems Approach to Computer Technology	3
PHO 111	Photography I	3
PSY 111	Psychology I	3

**Winter**

CRJ 118	Forensic Photography	3
CRJ 120	Juvenile Procedures	3
CRJ 123	Patrol Operations	3
ENG 111	English I	4
MTH 106	Business Math	3

**Spring**

CRJ 125	Community Policing	3
COM 111	Interpersonal Communication or	
COM 121	Public Speaking	3
ENG 112	English II	4
PHO 121	Color Photography I	3
SOC 110	Sociology	3

**Fall**

CRJ 201	Police Administration	3
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CRJ 216	Community Relations	3
CRJ 221	Forensic Science I	5
ENG 223	Technical Report Writing	3
PLS 220	Constitutional Law	3
SWK 105	Chemical Dependency I	4

**Winter**

CRJ 223	Forensic Science II	5
CRJ 226	Interview/Interrogation	3
CRJ 228	Criminal Investigation	3
CRJ 231	Criminal Law	3
- -	Humanities/Social Science Elective 3	

**Spring**

CRJ 230	Social Justice	3
CRJ 232	Ohio Criminal Code	3
CRJ 250	Community Resources	3
CRJ 280	Practicum	3
	<b>Total Credit Hours</b>	<b>98</b>

Note: See Criminal Justice Coordinator for additional information on technical electives.

# Early Childhood Education

See Teacher Education Preparation

## Emergency Medical Services

### EMERGENCY MEDICAL SERVICES

Emergency medical services are expanding rapidly with more opportunities developing for emergency medical technicians (EMTs) and paramedics.

Although working in EMS has traditionally meant working for a fire department, rescue squad or ambulance, there are also positions in education, management, research publishing, communications, support services and health agencies.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult their EMS advisors for help in planning their schedules.

#### Learning Outcomes

Upon completion of an associate degree in Emergency Medical Services, a graduate will be able to:

- demonstrate technical proficiency in all skills necessary to fulfill the role of entry-level paramedic.
- communicate effectively with victims, families and other healthcare providers.
- exhibit behaviors consistent with professional standards and employer expectations.
- demonstrate ability to integrate patho-physiologic and psycho-social principles and assessment findings to formulate a field impression and implement a treatment plan for the out-of-hospital client.

#### Overview

Clark State Community College offers a two-year associate degree and several certification programs. The certification courses may be taken separately or in conjunction with the associate degree program. The program introduces the student to a variety of emergency care situations and experiences both in the hospital setting and on emergency vehicles. Both day and evening courses are available. The associate degree program is normally held in the evening, but many courses may be taken during the day.

#### Scholastic Preparation

All entering students must have a high school diploma or its equivalent. In addition, each student must take reading, writing and math placement tests and may need to take college preparatory courses if indicated by placement testing scores.

#### Prerequisites

An individual seeking a career in emergency medical services should realize that to be successful, he/she must be emotionally stable, flexible and physically fit enough to perform the minimum entry-level job requirements.

Prior to entering EMS 131, the student must meet the following entrance requirements:

- Pass COMPASS Reading test with a score of 70 and COMPASS Math test with score of 47, or pass with a grade of C or better the appropriate College preparatory course. (CPE 061 and/or CPE 062 for Reading and CPE 091 for Math)
- Complete MST 105 and BIO 105 with a C or better.
- Complete a Request to Enter form which can be obtained from the Admissions Office or online.
- Have Ohio EMT-Basic certification.
- Have Current CPR provider certification.
- Obtain three letters of recommendation.
- Complete physical exam and health requirements.
- Complete criminal background check requirements.

#### Articulated Credit

Students who have current Ohio EMT-Paramedic certification and wish to obtain an associate degree in Emergency Medical Services will be granted articulated credit for MST 105 Medical Terminology, BIO 105 Fundamentals of Anatomy and Physiology and the EMS Paramedic courses listed in the first year of the curriculum after completing 20 hours of coursework towards their EMS degree at Clark State. Students who wish to be granted articulated credit must submit an EMS Articulated Credit Application form and appropriate documentation to the Dean of Health and Human Services. The Articulated Credit Application form is available in the Health and Human Services Division Office, Applied Science Center, Room 133.

#### Graduation Requirements

To qualify for an Associate Degree, Emergency Medical Services students must pass all the required courses, have a cumulative GPA of 2.0, and have a C as a minimum grade in all the technical (EMS) courses.

In addition, students must have completed at least 30 credits of coursework, including MGT 106, all second year EMS course, and the 7 credit hours of technical electives at Clark State.

Credit equivalencies such as articulated, experiential, transfer or proficiency credit do not count towards this requirement.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Summer</b>		
MST 105	Medical Terminology	3
BIO 105	Fundamentals of Anatomy and Physiology	4
<b>Fall</b>		
EMS 131	Paramedic Theory/Practice I*	6
EMS 132	Paramedic Practical Skills Lab I*	1
EMS 112	Paramedic Hospital Practice I*	1
EMS 118	Paramedic Field Practice I*	1
ENG 111	English I	4
ITS -	Computer Modules	3
<b>Winter</b>		
EMS 133	Paramedic Theory II	6
EMS 134	Paramedic Practical Skills Lab II	1
EMS 114	Paramedic Hospital Practice II	2
EMS 120	Paramedic Field Practice II	1
ENG 112	English II	4
PSY 111	Psychology I	3
<b>Spring</b>		
EMS 135	Paramedic Theory III	6
EMS 136	Paramedic Practical Skills Lab III	1
EMS 116	Paramedic Hospital Practice III	2
EMS 122	Paramedic Field Practice III	1
COM 111	Interpersonal Communication	3
PSY 230	Abnormal Psychology	3
<b>Fall</b>		
EMS 225	Advanced Patient Assessment	4
MGT 106	Organizational Behavior	4
PHL 210	Ethics	3
--	Humanities/Social Science Elective	3
<b>Winter</b>		
EMS 220	EMS Pharmacology	3
EMS 240	Hazardous Material/Disaster Management	3
PSY 223	Lifespan Human Growth and Development	5
--	Technical Elective*	3
<b>Spring</b>		
EMS 250	EMS Legal Insights	2
ENG 223	Technical Report Writing	3
--	Humanities/Social Science Elective	3
--	Technical Elective**	4
<b>Total Credit Hours</b>		<b>96</b>

\*Students who have current Ohio EMT Intermediate Certification can obtain articulated credit for EMS 131, EMS 132, EMS 112 and EMS 118

\*\*Technical electives include: SWK 105, SWK 220, MGT 112, HRM 225 and FFC (Fire Fighter Courses)

## EMERGENCY MEDICAL SERVICES DEPARTMENTAL CERTIFICATES

### EMT-BASIC CERTIFICATION PROGRAM

The EMT-Basic Course is an eight credit-hour course that includes 130 hours of classroom, clinical and lab instruction that can be completed in one quarter. Upon successful completion of this course the student is eligible to sit for the National Registry and State Certification Examination at the basic level. Those who complete the course are prepared to work in an entry-level position providing ambulance services and in fire divisions statewide. This course is the foundation course that serves as a stepping stone to full paramedic certification. Students entering EMS 100 must:

- have Basic Life Support (BLS) certification for professional CPR or obtain instructor permission to enroll in EMS 171, Basic Life Support, concurrently.
- complete health requirements.
- complete criminal background check requirement.

Students must be 18 years of age to take the state examination.

Course #	Course Title	Credit Hours
EMS 100	EMT-Basic Theory and Practice	8

### EMT-INTERMEDIATE CERTIFICATION PROGRAM

This program builds on the existing knowledge and skill of the EMT-Basic certification in the following distinct areas: roles and responsibilities of the advanced-level provider, pre-hospital environment, preparatory skills including advanced patient assessment, medical communications, advanced airway management, defibrillation, epinephrine administration, pain management and shock management with intravenous fluid therapy. The courses listed below provide the foundation for state and National Registry Certification at the intermediate level. Students who have current EMT Intermediate certification can apply to enter the paramedic program in the winter quarter if they have completed MST 105 and BIO 105 with a C or better.

#### Prerequisites

Prior to entering EMS 107, the student must meet the following entrance requirements:

- Pass COMPASS Reading test with score of 70 and COMPASS Math test with score of 47, or pass with a grade of C or better the appropriate College preparatory course. (CPE 061 and/or CPE 062 for Reading and CPE 091 for Math)
- Complete a Request to Enter form which can be obtained from the Admissions office, Health and Human Services Division office or online.

- Have Ohio EMT-Basic certification.
- Have current CPR provider certification.
- Obtain three letters of recommendation.
- Complete physical exam and health requirements.
- Complete criminal background check requirements.

An individual seeking a career in emergency medical services should realize that to be successful he/she must be emotionally stable, flexible and physically fit enough to perform the minimum entry-level job requirements.

Course #	Course Title	Credit Hours
<b>Winter</b>		
EMS 107	EMT Intermediate Theory/Practice I	4
<b>Spring</b>		
EMS 108	EMT-Intermediate Theory/Practice II	3
EMS 113	EMT-Intermediate Hospital/Field Practice	1
Total Credit Hours		8

## PARAMEDIC CERTIFICATION PROGRAM

The Paramedic Certification Program provides quality education in the “art and science” of advanced out-of-hospital emergency care. This curriculum provides for integration of knowledge and skills including pre-hospital environment, preparatory skills, trauma and burns, medical emergencies, OB/GYN emergencies, behavioral emergencies and crisis intervention. Upon successful completion, the student will meet the objectives of the National Standard Paramedic Training Curriculum, providing eligibility for National Registry Certification exam.

### Prerequisites

An individual seeking a career in emergency medical services should realize that to be successful, he/she must be emotionally stable, flexible and physically fit enough to perform the minimum entry level job requirement.

Prior to entering EMS 131, the student must meet the following entrance requirements:

- Pass COMPASS Reading test with score of 70 and COMPASS Math test with score of 47, or pass with a grade of C or better, the appropriate College preparatory course. (CPE 061 and/or CPE 062 for Reading and CPE 091 for Math)
- Complete MST 105 and BIO 105 with a C or better.
- Complete a Request to Enter form which can be obtained From the Admissions Office or online.
- Have Ohio EMT-Basic certification.
- Have Current CPR provider card.
- Obtain three letters of recommendation.
- Complete physical exam and health requirements.
- Complete criminal background check requirements.

Course #	Course Title	Credit Hours
<b>Summer</b>		
MST 105	Medical Terminology	3
BIO 105	Fundamentals of Anatomy & Physiology	4
<b>Fall</b>		
EMS 131	Paramedic Theory I*	6
EMS 132	Paramedic Practical Skills Lab I*	1
EMS 112	Paramedic Hospital Practice I*	1
EMS 118	Paramedic Field Practice I*	1
<b>Winter</b>		
EMS 133	Paramedic Theory II	6
EMS 134	Paramedic Practical Skills Lab II	1
EMS 114	Paramedic Hospital Practice II	2
EMS 120	Paramedic Field Practice II	1
<b>Spring</b>		
EMS 135	Paramedic Theory III	6
EMS 136	Paramedic Practical Skills Lab III	1
EMS 116	Paramedic Hospital Practice III	2
EMS 122	Paramedic Field Practice III	1
Total Credit Hours		36

\*Students who have current EMT Intermediate certification can obtain articulated credit for EMS 131, EMS 132, EMS 112 and EMS 118

## PARAMEDIC CERTIFICATION PROGRAM FOR REGISTERED NURSES

This program is designed to provide education encompassing the six divisions of the USDOT National Standard Paramedic Training Curriculum in an enhanced format. The registered nurse who has prior education and experience in emergency and/or critical care will have the opportunity to achieve advanced standing in the Paramedic Certification Program.

### Prerequisites

An individual seeking a career in emergency medical services should realize that to be successful, he/she must be emotionally stable, flexible and physically fit enough to perform the minimum entry-level job requirements.

Prior to entering EMS 288, the student must meet the following entrance requirements:

- Complete a Request to Enter form in the Admissions Office.
- Have Ohio EMT-Basic certification.
- Have current CPR provider, ACLS provider; PALS provider, and PHTLS or BTLs provider certifications.
- Obtain three letters of recommendation.
- Complete physical exam and health requirements.
- Complete criminal background check if required by clinical agency.

- Have active Ohio licensure as RN, nurse practitioner or physician's assistant.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
EMS 288	Paramedic Theory for RNs	6

# English Transfer - Wright State University

## ENGLISH TRANSFER

The English Transfer program is a curriculum that will prepare a student to transfer into a major in English at Wright State University. It serves as a quarter-by-quarter guideline for transfer.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory education recommendations. Many individuals, especially part-time students and those taking college preparatory education courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Arts degree in pre-English, a graduate will be able to meet the goals outlined for the general Associate of Arts degree; additionally, the student will:

- demonstrate familiarity with English, American, and/or World Literature (in English).
- exhibit a high level of writing proficiency.

### Scholastic Preparation

Students entering this program should have taken the college preparatory courses offered by their high schools. Students who do not test into STT 264, Statistics I, will need to take the necessary prerequisite mathematics courses before beginning the Statistics sequence. Ideally, students should also have taken a foreign language in high school. Foreign language proficiency may replace the foreign language courses listed; the student who has taken foreign language courses should consult with advisors at Wright State University regarding this requirement.

Course #	Course Title	Credit Hours
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#### Fall

ENG 111	English I	4
SPN 111	Spanish I	4
HST 111	Western Civilization to the 14th Century	3
ART 130	Appreciation of the Arts	3
ITS 12A	Windows Concepts	2
ITS 12W	Beginning Word Processing	1

#### Winter

ENG 112	English II	4
SPN 112	Spanish II	4
STT 264	Statistics I	4
HST 112	Western Civilization through 18th Century	3

ITS 12D	Beginning Database	1
ITS 12P	Beginning Presentation	1
ITS 12S	Beginning Spreadsheet	1

#### Spring

SPN 113	Spanish III	4
HST 113	Western Civilization 19th Century to the Present	3
PSY 111	Psychology I	3
RST **	Regional Studies	3

#### Fall

SPN 211	Spanish IV	4
BIO 141	Evolution, Diversity and Ecology* or Physical Geology*	5
GLG 131	Physical Geology*	5
PSY 112	Psychology II	3
ENG 230	Great Books: World Literature	3

#### Winter

SPN 212	Spanish V	4
ENG 250	American Literature**	3
COM 121	Public Speaking	3
BIO 142	The Human Organism or Historical Geology	5
GLG 132	Historical Geology	5

#### Spring

HUM 299	Capstone	3
BIO 143	Cell Biology/Genetics	5
OR		
GLG 133	Environmental Geology	5
SOC 110	Sociology	3
PLS 110	American National Government	3

Total Credit Hours 92

\*Students should take either all three BIO courses or all three GLG courses.

\*\*Students may also choose one from ENG 261 and ENG 262, British Literature. See elective courses.

# Graphic Design

## GRAPHIC DESIGN

Graphic design is one of the fastest growing and most diverse professions in the communications field. Graphic designers develop a variety of visual communication solutions for clients including magazine and newspaper advertising, annual reports, product packaging, brochures, corporate identity, catalogs, editorial graphics, book covers and posters.

The aim is integration of the conceptual and the technical. Students will develop critical and conceptual thinking abilities so that they can communicate any idea clearly and powerfully. Students will be prepared for the practice of design in the professional context and provided the basis for their continued creative and personal growth. With a problem-solving format, students will develop visual communication skills, explore the integration of type and images through a variety of traditional and computer media and imaginatively deliver messages responsive to the needs of the sender and the receiving audience.

The Graphic Design program is a two-year computer intensive learning experience focusing on industry-standard practices. Dedicated to keeping up with technological advances affecting the visual arts, the program integrates technology with fine arts sensibility.

The program course schedule is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

### Learning Outcomes

Upon completion of an associate degree in Graphic Design, a graduate will be able to:

- utilize QuarkXpress effectively as a layout tool.
- utilize Adobe PhotoShop effectively as an image-editing tool.
- utilize Adobe Illustrator effectively as a vector graphic/ illustration tool.
- verbally communicate ideas, concepts and design knowledge.
- design effectively with type.
- present himself or herself in an organized and professional manner.
- write and design a professional resume and portfolio.
- manage a design problem from conceptualization to a finished layout.

Course #	Course Title	Credit Hours
<b>Fall</b>		
GPH 100	Introduction to Graphic Design	4
GPH 105	Design Fundamentals	3
ART 111	Drawing I	3
ENG 111	English I	4
MGT 105	Contemporary American Business	3
<b>Winter</b>		
GPH 110	Digital Illustration	3
GPH 112	Digital Typography I	3
ART 112	Drawing II	3
ENG 112	English II	4
	Humanities/Social Science Elective	3
<b>Spring</b>		
GPH 114	Digital Typography II	3
GPH 201	Electronic Imagery I	3
ART 113	Drawing III	3
ART 135	Art History III	3
ENG 223	Technical Report Writing	3
<b>Fall</b>		
GPH 120	Logo, Symbol, Corporate ID	3
GPH 202	Electronic Imagery II	3
GPH 211	Computer Layout I	3
PHL 220	Business Ethics	3
MGT 106	Organizational Behavior	4
<b>Winter</b>		
GPH 203	Electronic Imagery III	3
GPH 212	Computer Layout II	3
GPH 220	Illustration Techniques	3
ITS 230	Introduction to Web Design	3
GPH 251	Professional Development I	3
<b>Spring</b>		
GPH 205	Advertising Layout	3
ITS 231	Web Page Multimedia	3
GPH 252	Professional Development II	3
GPH 285	Graphic Design Internship	3
	Social Science Elective	3
<b>Total Credit Hours</b>		<b>94</b>

Note: It is extremely important that students save all artwork from the first quarter forward to enable them to build a portfolio in GPH 251 and GPH 252.

# Industrial and Engineering Technologies

## COMPUTER-AIDED DESIGN (CAD) TECHNOLOGY

Students completing an Associate of Applied Science degree in Computer-Aided Design (CAD) Technology are qualified to play a support role to the engineering professions in industrial, research and academic areas preparing drawings, blueprints, layouts, bills of materials, manufacturing and product support documentation. Training in the area of advanced computer-aided drafting is also included.

In addition to applied technical courses, Computer-Aided Design (CAD) Technology includes an optional co-op experience. Students must complete EBE 100, Employability Skills, as a technical elective and then work with the Office of Career Management to secure an appropriate co-op site.

Most of the first-year courses are offered as both day and evening sections. It is intended that the programs can be completed by taking courses in the evening on a part-time basis. Students may be required to take evening classes to complete the program since day sections may not be offered for some of the second-year courses.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Science degree in Computer-Aided Design (CAD) Technology, a graduate will be able to:

- produce a finished product per quality specifications using knowledge of engineering materials, metrology and manufacturing processes.
- prepare drawings to completely describe a part for manufacture per American National Standards Institute (ANSI) specifications.
- apply Design (CAD) to produce mechanical drawings using a CAD system.
- use knowledge of construction materials and practices to specify and provide cost and material estimates for a construction project.
- apply Design (CAD) to produce an illustrated part/maintenance manual.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing

for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Scholastic Preparation

Students starting the program should have had two years of high school drafting and one year each of high school algebra, trigonometry and physics or equivalent. Students may take these preparatory courses at Clark State, but it will require a longer amount of time to complete their degree program. Students who have not had two years of high school drafting or significant work experience in drafting will be required to take DFT 101, Drafting I. Those without high school physics must complete PHY 110, Fundamentals of Physics.

Course #	Course Title	Credit Hours
<b>Fall</b>		
DFT 102	Drafting II	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
INT 101	Metrology I	2
MTH 101	Technical Math Applications A	1
<b>Winter</b>		
DFT 211	Computer-Aided Design	4
ENG 112	English II	4
ENT 109	Manufacturing Lab	2
ENT 110	Manufacturing Processes	3
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
<b>Spring</b>		
DFT 212	Computer Aided Design II	4
ENG 223	Technical Report Writing	3
ENT 111	Engineering Materials	3
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3
PHY 111	Physics I	4
<b>Fall</b>		
DFT 111	Architecture I	4
DFT 214	Solid Modeling	4
ENT 205	Circuits and Machines	4
ENT 211	Statics	3
<b>Winter</b>		
DFT 215	Advanced Solid Modeling	3
COM 121	Public Speaking	3
ENT 213	Strength of Materials	4
---	Co-op or Technical Elective**	2
---	Humanities/Social Science Elective (GA)	3



<b>Spring</b>		
DFT 203	Technical Publication	4
---	Co-op or Technical Elective**	4
ECO 110	Economics*	3
SOC 110	Sociology*	3
Total Credit Hours		95

\*Other humanities/social science electives may be substituted (at least one must be a social science and one must fulfill the Global Awareness requirement).

\*\* Students must earn a minimum of 6 credit hours in any combination of co-op (EBE 100, EBE 282 - EBE 284, EBE 292 - EBE 294) or technical electives. Technical electives may come from any course not already prescribed in the following areas: DFT (except DFT 101), ENT, INT or NTK 176.

### ENGINEERING TRANSFER

The Engineering and Industrial Technologies Transfer program is a calculus-based, pre-engineering curriculum that will prepare a student to transfer into a baccalaureate degree engineering program at a college or university. It serves as a general guideline for transfer. The best selection of courses for a given student will vary depending upon the area of engineering in which the student is interested and the institution to which the student plans to transfer.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory education recommendations. Many individuals, especially part-time students and those taking college preparatory education courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an associate degree in pre-engineering, a graduate will be able to meet the goals outlined for the general associate of science degree plus the student will be able to:

- formulate the mathematical models for physical and engineering problems.
- analyze the mathematical models of physical and engineering problems.
- formulate kinematics and dynamics problems.
- analyze kinematics and dynamics problems.

### Scholastic Preparation

Students entering this program should have taken all of the high-level mathematics and calculus-based courses offered by their high schools. Students who cannot test into Calculus I will need to take the necessary prerequisite mathematics courses before beginning the calculus sequence. Students should also have taken all of the high school physics and chemistry courses available to them. If they have not had

adequate preparation in these areas, they will need to take the prerequisite chemistry (CHM 115) and physics (PHY 110) courses. Students who have not had two years of high school drafting or significant work experience in drafting will be required to take DFT 101, Drafting I.

Course #	Course Title	Credit Hours
<b>Fall</b>		
CHM 121	General Chemistry I	5
ENG 111	English I	4
HST 111	Western Civilization to 14th Century	3
MTH 221	Calculus I**	5
<b>Winter</b>		
DFT 211	Computer Aided Design I	4
ENG 112	English II	4
HST 112	Western Civilization from 14th through 18th Century	3
MTH 222	Calculus II	5
<b>Spring</b>		
ENG 230	Great Books: Literature	3
HST 113	Western Civilization from 19th Century to Present	3
MTH 223	Calculus III	5
SOC 110	Sociology	3
<b>Summer</b>		
ECO 110	General Economics	3
MTH 240	Linear Algebra	3
PLS 130	Political Issues	3
<b>Fall</b>		
MTH 224	Calculus IV/Multivariate Calculus	5
PHY 250	General Physics I***	6
PSY 111	Psychology I	3
GEO 220	World Regional Geography	3
SOC 220	Comparing Cultures	3
<b>Winter</b>		
ENT 261	Engineering Mechanics I	5
MTH 230	Differential Equations or	
CHM 122	General Chemistry II****	5
PHY 251	General Physics II	5
ART 130	Appreciation of the Arts or	
MUS 130	Music Appreciation or	
THE 130	Introduction to Theatre	3
<b>Spring</b>		
ENT 262	Engineering Mechanics II	5
PHL 250	Great Books: Philosophy	3
PHY 252	General Physics III	5
RST -	Regional Studies course	3
Total Credit Hours		110

\*This is a general guideline for Engineering transfer. The best selection of courses for a given student will vary depending upon the actual area of engineering he or she wishes to enter and the college or university to which the student plans to transfer. All engineering transfer students should consult with their engineering academic advisor.

\*\*Students who are not prepared for calculus must take the necessary math prerequisites before MTH 221. Students who need the College Algebra sequence and Trigonometry courses will need three years to progress through the course sequence.

\*\*\*Students who cannot test out of PHY 110 will need to take that as a prerequisite to PHY 250.

\*\*\*\*Some students may wish to complete the 3-quarter chemistry sequence for transfer purposes.

## INDUSTRIAL TECHNOLOGY

The Industrial Technology program has been developed in response to the great need expressed by manufacturers in the Champaign, Clark, Greene and Logan County areas for skilled technicians. The program is intended to train for career fields such as machine repair technician or electrical maintenance technician.

Technical coursework in the program is designed such that it can be used to support company-sponsored apprenticeship programs.

In addition to applied technical courses, Industrial Technology includes an optional co-op experience. Students must complete EBE 100, Employability Skills, as a technical elective and then work with Career Services to secure an appropriate co-op site.

### Learning Outcomes

Upon completion of an associate degree in Industrial Technology, a graduate will be able to:

- demonstrate and understand the safety requirements for working in an industrial setting.
- demonstrate fundamental knowledge of electrical, mechanical and fluid power machinery.
- use commonly available instruments, schematics, operating manuals and troubleshooting guides to troubleshoot electrical, fluid power, and mechanical equipment.
- design, build and document an industrial project.
- demonstrate a basic knowledge of operating and programming automated systems.
- use computers in troubleshooting, maintenance planning and report writing using application software.
- demonstrate the ability to make measurements and log the measurements properly based on the requirements of the components or systems.

### Directed Learning Laboratory

Clark State Community College has recognized the need for

students who are currently working to have flexible class hours. As a result, many of the courses in the Industrial Technology program will be offered in the College's Directed Learning Laboratory. Most Industrial Technology (INT) courses, along with other selected technical courses, will be offered in a modular format that will allow students to come to the lab on their own schedule and complete the coursework and laboratory assignments. The lab will be staffed by a faculty member and is open day, evening, and Saturday hours to accommodate many working schedules. The days and times that students complete the coursework in the lab is up to the individual student within the open hours of the lab. Some group assignments may be required. The ability to learn on an independent basis will help ensure student success in this program.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Scholastic Preparation

Students should have had one year of high school algebra or the equivalent. Students may take preparatory courses at Clark State, but it will require a longer amount of time to complete their degree program. Students who have not had two years of high school drafting or significant work experience in drafting will be required to take DFT 101, Drafting I.

Course #	Course Title	Credit Hours
<b>Fall</b>		
INT 140	Industrial Safety	2
INT 115	Industrial Calculations	3
DFT 102	Drafting I	3
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
<b>Winter</b>		
INT 101	Metrology I	2
INT 120	Hydraulics/Pneumatics I	4
INT 150	Electrical Systems	4
DFT 211	Computer Aided Design I	4
ENG 112	English II	4
<b>Spring</b>		
INT 125	Hydraulics/Pneumatics II	4
INT 155	Motors and Motor Controls	4
INT 170	Mechanical Maintenance	4
COM 111	Interpersonal Communication	3
EBE 100	Employability Skills	2

<b>Summer</b>		
INT	Co-op or Technical Elective	4
<b>Fall</b>		
INT 251	Programmable Logic Controllers	4
INT 252	Automated Systems	4
NTK 176	Network Essentials I	6
SPN 100	Conversational Spanish*	3
<b>Winter</b>		
INT 226	Hydraulic Troubleshooting or	
INT 227	Pneumatic Troubleshooting	3
INT 255	Electrical Troubleshooting	4
INT 260	Electrical Distribution	4
ENG 223	Technical Report Writing	3
---	Humanities/Social Science Elective	3
<b>Spring</b>		
INT 270	Industrial Machine Maintenance	4
INT 280	Industrial Technology Projects	4
INT -	Co-op or Technical Elective	4
COM 121	Public Speaking	3
ECO 110	General Economics*	3
	<b>Total Credit Hours</b>	<b>106</b>

\*Other humanities/social science electives may be substituted (at least one must be a social science and one must fulfill the Global Awareness requirement)

\*\* Students must earn a minimum of 8 credit hours in any combination of co-op (EBE 282 - EBE 284, EBE 292 - EBE 294) or technical electives. Technical electives may come from any course not already prescribed in the following areas: DFT (except DFT 101), ENT, and INT. AGR115 (Welding), 187 (Small Gas Engines), and 245 (Advanced Welding) can also be used as technical electives.

## MANUFACTURING ENGINEERING TECHNOLOGY

The Manufacturing Engineering Technology program prepares students for a variety of positions within a manufacturing enterprise. The program builds on the student's knowledge of computer-aided design, electronics and manufacturing processes, providing additional skills in areas such as statistical process control, automation and computer numerical control.

In addition to applied technical courses, Manufacturing Engineering Technology includes an optional co-op experience.

Students must complete EBE 100, Employability Skills, as a technical elective and then work with Office of Career Management to secure an appropriate co-op site.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many

individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Scholastic Preparation

Students starting the program should have had two years of high school drafting and one year each of high school algebra, trigonometry and physics or the equivalents. Students may take these preparatory courses at Clark State, but they will require a longer amount of time to complete their degree program. Students who have not had two years of high school drafting or significant work experience in drafting will be required to take DFT 101, Drafting I. Those without high school physics must complete PHY 110, Fundamentals of Physics.

### Learning Outcomes

Upon completion of an Associate of Applied Science degree in Manufacturing Technology, a graduate will be able to:

- demonstrate basic knowledge of manufacturing processes including fabrication and assembly of metals, plastics, ceramics and composites.
- use basic computer-aided design skills to draw parts, fixtures and equipment layouts.
- demonstrate a basic knowledge of quality assurance.
- demonstrate a basic knowledge of process control including CNC programming and PLC controls.
- demonstrate a basic knowledge of materials properties, manufacturing methods and cost.
- design, build and document an industrial project.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
<b>Fall</b>		
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
DFT 102	Drafting II	3
ENG 111	English I	4
INT 101	Metrology I	2
MTH 101	Technical Math Applications A	1

<b>Winter</b>		
ENT 109	Manufacturing Lab	2
ENT 110	Manufacturing Processes	3
DFT 211	Computer Aided Design I	4
ENG 112	English II	4
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
<b>Spring</b>		
ENT 111	Engineering Materials	3
EBE 100	Employability Skills	2
ENG 223	Technical Report Writing	3
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3
PHY 111	Physics I	4
<b>Summer</b>		
ENT 205	Circuits and Machines	4
ENT 210	Engineering Statistics	3
ENT	Co-op or Technical Elective**	4
<b>Fall</b>		
ENT 211	Statics	3
ENT	Co-op or Technical Elective**	3
INT 215	Statistical Process Control	3
INT 251	Programmable Logic Controllers	4
DFT 214	Solid Modeling	4
<b>Winter</b>		
ENT 213	Strength of Materials	4
ENT 221	Computer Numerical Control	4
ENT	Co-op or Technical Elective**	3
INT 252	Automated Systems	4
	Humanities/Social Science Elective	3
<b>Spring</b>		
ENT	Co-op or Technical Elective**	4
COM 121	Public Speaking	3
ECO 110	Economics*	3
SOC 110	Sociology*	3
	<b>Total Credit Hours</b>	<b>108</b>

\*Other humanities/social science electives may be substituted (at least one must be a social science and one must fulfill the Global Awareness requirement).

\*\* Students must earn a minimum of fourteen credit hours in any combination of co-op (EBE 100, EBE 282 - EBE 284, EBE 292 - EBE 294) or technical electives. Technical electives may come from any course not already prescribed in the following areas: DFT (except DFT 101), ENT, INT, or NTK 176.

## MECHANICAL ENGINEERING TECHNOLOGY

The Mechanical Engineering Technology program is designed to prepare students for entry-level technology occupations related to mechanical engineering. These occupations include a variety of jobs titles in the areas of product design, drafting, analysis, manufacturing, quality control and testing.

Skills in the area of creating and interpreting engineering drawings and the practices and procedures of manufacturing and principles of product design are emphasized.

Students that might wish to transfer coursework from Clark State to other institutions to earn a bachelor's degree in mechanical engineering technology should contact the transfer institution very early in their program at Clark State. Students should also consult their academic advisor for help in planning their schedules.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study.

### Scholastic Preparation

Students starting the program should have had two years of high school drafting and the entire high school high-level math, trigonometry, chemistry and physics sequences. Students may take these courses at Clark State, but they will require additional time to complete their degree program. Students who have not had two years of high school drafting or significant work experience in drafting will be required to complete DFT101, Drafting I. Those without high school physics must complete PHY110, Fundamentals of Physics.

### Learning Outcomes

Upon completion of an associate degree in Mechanical Engineering Technology a graduate will be able to:

- demonstrate basic knowledge of manufacturing processes including fabrication and assembly of metals, plastics, ceramics and composite materials.
- use basic computer-aided design skills to draw parts, fixtures and equipment layouts.
- demonstrate a basic knowledge of quality assurance.
- demonstrate a basic knowledge of process control including PLC controls and CNC programming.
- demonstrate a basic knowledge of materials properties, manufacturing methods and product cost.
- design, build and document an industrial project.
- formulate and analyze the mathematical models for physical and engineering problems.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
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**Fall**

DFT 102	Drafting II	3
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
ENG 111	English I	4
MTH 121	College Algebra I	3

**Winter**

ENT 109	Manufacturing Lab	2
ENT 110	Manufacturing Processes	3
ECO 221	Principles of Macroeconomics	3
ENG 112	English II	4
HST 112*	Western Civilization from 14th through 18th Century	3
MTH 122	College Algebra II	3

**Spring**

ECO 222	Principles of Microeconomics	3
ENG 223	Technical Report Writing	3
HST 113*	Western Civilization from 19th Century to Present	3
ENT 111	Engineering Materials	3
ENT 210	Engineering Statistics	3
MTH 140	Trigonometry	3

**Summer**

COM 121	Public Speaking	3
SOC 110	Sociology*	3

**Fall**

MTH 221	Calculus I	5
PHY 250	General Physics	6
ENT 211	Engineering Statics	3
ENT 205	Circuits and Machines	4

**Winter**

DFT 211	Computer Aided Design I	4
MTH 222	Calculus II	5
ENT 213	Strength of Materials	4
PHY 251	General Physics II	5

**Spring**

MTH 223	Calculus III	5
PHY 252	General Physics III	5
CHM 115	Introduction to General Chemistry	5

Total Credit Hours	109
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Students wishing to seek an Engineering Technology Bachelors Degree at a four-year institution are highly encouraged to review articulation agreements and consult with your academic advisor.

\*Other humanities/social science electives may be substituted (at least one must be a social science and one must fulfill the Global Awareness requirement)

\*\*\*If students begin the math series early with Calculus 221, ENT core courses may be substituted for MTH121, 122, or 140

### COMPUTER-AIDED DESIGN (CAD) CERTIFICATE

The Computer-Aided Design (CAD) Certificate is designed to provide the technical background necessary to produce mechanical drawings using both manual and computer-aided drafting techniques. Manufacturing coursework is included to help students understand the principles of manufacturability in mechanical design.

Certificate programs are designed for those students who seek to enhance their job-related skills in a specialized area. These certificates are typically a portion of the courses in one of the associate degree programs. Certificate programs will take somewhat longer than one year to complete due to the sequence of prerequisites and the terms in which courses are offered. Coursework included in a certificate program may ultimately be applied for the associate degree in the related technology program.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Scholastic Preparation

The amount of time required to complete a certificate program is dependent on the level of student preparation. Students starting the programs should have had one year each of high school algebra, trigonometry, and physics or equivalent. Students electing the Computer-Aided Design (CAD) certificate program should also have had two years of high school drafting. Students who have not had two years of high school drafting or significant work experience in drafting will be required to take DFT 101, Drafting I. Students may take these preparatory courses at Clark State, but it will require a longer amount of time to complete their program.

Course #	Course Title	Credit Hours
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**Fall**

DFT 102	Drafting II	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
INT 101	Metrology I	2
MTH 101	Technical Math Applications A	1

**Winter**

DFT 211	Computer-Aided Design I	4
ENT 109	Manufacturing Laboratory	2
ENT 110	Manufacturing Processes	3
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3

**Spring**

DFT 212	Computer-Aided Design II	4
ENT 111	Engineering Materials	3
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3

**Fall**

DFT 111	Architecture I	4
DFT 214	Solid Modeling	4

Total Credit Hours 48

**ELECTRICAL MAINTENANCE CERTIFICATE**

The Electrical Maintenance Certificate provides a broad base of courses in the field of industrial maintenance.

Course #	Course Title	Credit Hours
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**Fall**

INT 140	Industrial Safety	2
INT 101	Metrology I	2
DFT 102	Drafting II	3
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
EBE 100	Employability Skills	2

**Winter**

INT 115	Industrial Calculations	3
INT 120	Hydraulics/Pneumatics I	4
INT 150	Electrical Systems	4
INT 170	Mechanical Maintenance	4
COM 121	Public Speaking	3

**Spring**

INT 125	Hydraulics/Pneumatics II	4
INT 155	Motors and Motor Controls	4
INT 251	Programmable Logic Controllers	4
INT	Co-op or Technical Elective	4

Total Credit Hours 50

**ELECTRONICS CERTIFICATE**

The Electronics Certificate provides an extensive study of solid-state devices and systems for industrial operations.

Course #	Course Title	Credit Hours
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**Fall**

INT 140	Industrial Safety*	2
INT 101	Metrology I	2
INT 105	Blueprint Reading and Schematics	3
INT 115	Industrial Calculations	3
INT 150	Electrical Systems	4
ENT 121	Computer Basics for Applied Technology	3

**Winter**

INT 175	Foundations of Digital Control	4
INT 251	Programmable Logic Controllers	4
COM 121	Public Speaking	3
EBE 100	Employability Skills	2
ENG 111	English I	4

**Spring**

INT 155	Motors and Motor Controls	4
INT 212	Electronic Systems	4
INT 252	Automated Systems	4
INT - -	Co-op or Technical Elective	4

**Summer**

INT 225	Industrial Electronics	3
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Total Credit Hours 53

\*INT 140 must be completed before starting INT 150

**MANUFACTURING CERTIFICATE**

The Manufacturing Certificate is designed for students who wish to enhance their skills in areas related to manufacturing. Courses in drafting, computer-aided design, programmable logic controllers, automated systems and robotics are included since these skills are needed in new and in updating existing manufacturing processes. The program courses are all included in the Manufacturing Technology associate degree so students can continue with that program after achieving their certificate. Some of the courses are taught in the Directed Learning Lab, so they can fit the student's schedule.

**Scholastic Preparation**

The time required for a student to complete the certificate will depend on their level of preparation. They should have high school drafting, algebra, trigonometry and physics or their equivalents. These preparatory courses can be taken at Clark State, but that will increase the time required to complete the program.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
<b>Fall</b>		
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
DFT 102	Drafting II	3
ENG 111	English I	4
MTH 101	Technical Math Applications A	1
MTH 121	College Algebra I	3
<b>Winter</b>		
ENT 109	Manufacturing Lab	2
ENT 110	Manufacturing Processes	3
ENT 205	Circuits and Machines	4
DFT 211	Computer Aided Design I	4
MTH 107	Technical Math Applications B	1
MTH 140	Trigonometry	3
<b>Spring</b>		
ENG 112	English II	4
INT 101	Metrology I	2
INT 250	Programmable Logic Controllers	3
INT 252	Automated Systems	4
MTH 108	Technical Math Applications C	1
PHY 111	Physics I	4
	<b>Total Credit Hours</b>	<b>52</b>

# Management

## MANAGEMENT TECHNOLOGY

The Management curriculum provides a well-rounded education consisting of basic courses in accounting, information technology, economics, finance, business law, management, marketing, operations, interpersonal and customer service skills and communications. The associate degree in Management provides students with knowledge and skills for managing people, finances and operations.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Students with significant business experience, where expertise equals or exceeds the outcomes of a particular course(s), are offered two options for earning experiential credit. Proficiency exams are available for selected courses. Other courses may allow a student to potentially earn credit through a portfolio presentation.

Students who would like to enhance a degree in any field or those who do not plan to complete an associate degree in Management may select an abbreviated education by completing the course requirements for any of several certificate programs in Marketing and E-Business, Human Resources Management, Logistics and Supply Chain Management, Management, Small Business, Customer Service and Supervision. Courses taken completing these certificates can be counted in the relevant degree programs.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Management, a graduate will be able to do the following:

- apply basic business and management concepts, skills and tools.
- effectively use communications and human relations knowledge and skills.
- analyze quantitative data.
- demonstrate understanding of social responsibility, ethical and legal issues.
- demonstrate understanding of international business issues.
- effectively use information technology skills in the business environment.

### Degree Availability

The Management program is available during the day and the evening. Students should consult with an advisor for the recommended sequencing of courses.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
MGT 105	Contemporary American Business	3
MGT 106	Organizational Behavior	4
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ITS 103	Information Technology Basics*	3
<b>Winter</b>		
MGT 112	Principles of Management	4
ACC 112	Principles of Accounting II	4
COM 121	Public Speaking	3
ENG 135	Business Report Writing**** or	
ENG 112	English II	4
ITS 12P	Beginning Presentation Graphics*	1
ITS 12S	Beginning Spreadsheet*	1
<b>Spring</b>		
MGT 202	Quality Management	4
HRM 225	Human Resource Management	3
ACC 113	Principles of Accounting III	4
ENG 221	Business Communication	3
ITS 12D	Beginning Database*	1
MTH 106	Business Mathematics	3
<b>Fall</b>		
MGT 200	Project Management	4
ECO 221	Principles of Macroeconomics	3
PSY 111	Psychology I	3
STT 264	Statistics I	4
--	Technical Elective or Co-op**	3
<b>Winter</b>		
MGT 260	Legal Environment of Business	3
MGT 270	Business Finance	4
MKT 200	Principles of Marketing	4
LSC 272	Operations and Supply Chain Management	5
--	Humanities/Social Science Elective (GA)***	3



### Spring

MGT 250	Leadership in Organizations	4
MGT 265	Negotiation Skills	3
MGT 290	Business Strategy and Policy Seminar	4
ECO 222	Principles of Microeconomics	3
- -	Humanities/Social Science Elective***	3
Total Credit Hours		106

\*Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

\*\*Technical electives must total 3 credit hours. They can come from any combination of courses not already prescribed that use the following course codes: HRM, LSC, MGT, MKT, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080, ITS 081 or other college- prep -level course), NTK, OAD, RES.

\*\*\*ECO 110 is not acceptable for a social science elective; at least one humanities or one social science elective must be designated as a global awareness (GA) course.

\*\*\*\*ENG 135 will not necessarily transfer as the equivalent of ENG 112.

### CYBERSECURITY MANAGEMENT OPTION

The Management curriculum provides a well-rounded education consisting of basic courses in accounting, information technology, economics, finance, business law, management, marketing, operations, interpersonal and customer service skills and communications. The CyberSecurity Management option provides insight into the information security threats faced by all business organizations. This option prepares students to manage corporate data assets in a secure and legally responsible way.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Students with significant business experience, where expertise equals or exceeds the outcomes of a particular course(s), are offered two options for earning experiential credit. Proficiency exams are available for selected courses. Other courses may allow a student to potentially earn credit through a portfolio presentation.

Students who would like to enhance a degree in any field or those who do not plan to complete an associate degree in Management may select an abbreviated education by completing the course requirements for any of several certificate programs in Marketing and E-Business, Human Resources Management, Logistics and Supply Chain

Management, Management, Small Business, Customer Service and Supervision. Courses taken completing these certificates can be counted in the relevant degree programs.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in CyberSecurity Management Option, a graduate will be able to do the following:

- apply basic business and management concepts, skills and tools.
- effectively use communications and human relations knowledge and skills.
- analyze quantitative data.
- demonstrate understanding of social responsibility, ethical and legal issues.
- demonstrate understanding of international business issues.
- demonstrate understanding of cybersecurity management and technical issues.

### Degree Availability

The CyberSecurity Management Option is available during the day and the evening. Students should consult with an advisor for the recommended sequencing of courses.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
MGT 105	Contemporary American Business	3
MGT 106	Organizational Behavior	4
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ITS 103	Information Technology Basics*	3
<b>Winter</b>		
MGT 112	Principles of Management	4
ACC 112	Principles of Accounting II	4
COM 121	Public Speaking	3
ENG 135	Business Report Writing**** or	
ENG 112	English II	4
ITS 12P	Beginning Presentation Graphics*	1
ITS 12S	Beginning Spreadsheet*	1

**Spring**

MGT 202	Quality Management	4
HRM 225	Human Resource Management	3
ACC 113	Principles of Accounting III	4
ENG 221	Business Communication	3
ITS 12D	Beginning Database*	1
MTH 106	Business Mathematics	3

**Fall**

MGT 211	CyberSecurity Management I	5
PSY 111	Psychology I	3
STT 264	Statistics I	4
--	Technical Elective or Co-op	3
--	Humanities/Social Science Elective (GA)***	3

**Winter**

MGT 212	CyberSecurity Management II	5
MGT 260	Legal Environment of Business	3
ECO 222	Principles of Microeconomics	3
LSC 272	Operations and Supply Chain Management	5
MKT 200	Principles of Marketing	4

**Spring**

MGT 250	Leadership in Organizations	4
MGT 290	Business Strategy and Policy Seminar	4
NTK 246	CyberSecurity - Firewall Technologies or	
NTK 247	CyberSecurity - Forensic Analysis	5
--	Humanities/Social Science Elective***	3

Total Credit Hours 107

\*Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K Keyboarding/Word Processing.

\*\*Technical electives must total 3 credit hours. They can come from any combination of courses not already prescribed that use the following course codes: HRM, LSC ,MGT, MKT, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080, ITS 081 or other college -prep -level course), NTK, OAD, RES.

\*\*\*ECO 110 is not acceptable for a social science elective; at least one humanities or one social science elective must be designated as a global awareness (GA) course.

\*\*\*\*ENG 135 will not necessarily transfer as the equivalent of ENG 112.

**HUMAN RESOURCE MANAGEMENT OPTION**

The Human Resource Management option provides students with a well-rounded education. It consists of basic management courses complemented with in-depth studies of staffing, training and development, employment law and compensation and benefits. The program culminates with a discussion of current human resource management trends. The Human Resource Management curriculum is designed

to equip students with knowledge and practical skills for managing a company's human resource function.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Students with significant business experience, where expertise equals or exceeds the outcomes of a particular course(s), are offered two options for earning experiential credit. Proficiency exams are available for selected courses. Other courses may allow a student to potentially earn credit through a portfolio presentation.

Students who would like to enhance a degree in any field or those who do not plan to complete an associate degree may select an abbreviated education by completing the course requirements for any of several certificate programs in Human Resource Management, Marketing and E-Business, Logistics and Supply Chain Management, Management, Small Business, Customer Service and Supervision. Courses taken completing these certificates can be counted in the relevant degree program.

**Learning Outcomes**

Upon completion of an Associate of Applied Business degree in the Human Resource Management option, a graduate will be able to do the following:

- apply basic business and management concepts, skills and tools.
- effectively use communications and human relations knowledge and skills.
- analyze quantitative data.
- demonstrate understanding of social responsibility, ethica and legal issues.
- demonstrate understanding of international business issues.
- effectively use information technology skills, including the use of Internet resources and tools.
- apply knowledge and skills in four functional areas of human resources including staffing, training and development, employment law, and compensation and benefits.

**Transfer Options**

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
MGT 105	Contemporary American Business	3
MGT 106	Organizational Behavior	4
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ITS 103	Information Technology Basics	3
<b>Winter</b>		
MGT 112	Principles of Management	4
ACC 112	Principles of Accounting II	4
COM 121	Public Speaking	3
ENG 135	Business Report Writing**** or	
ENG 112	English II	4
ITS 12P	Beginning Presentation Graphics*	1
ITS 12S	Beginning Spreadsheet*	1
<b>Spring</b>		
HRM 225	Human Resource Management	3
MGT 202	Quality Management	4
ENG 221	Business Communication	3
ITS 12D	Beginning Database*	1
MTH 106	Business Mathematics	3
SOC 110	Sociology	3
<b>Fall</b>		
HRM 230	Training and Development	3
HRM 235	Employment Law	3
ECO 221	Principles of Macroeconomics	3
PSY 111	Psychology I	3
STT 264	Statistics I	4
	Technical Elective or EBE 100	2
<b>Winter</b>		
HRM 240	Staffing	4
HRM 245	Compensation and Benefits	3
MGT 260	Legal Environment of Business	3
MKT 200	Principles of Marketing	4
--	Humanities/Social Science elective (GA)	3
<b>Spring</b>		
HRM 270	Human Resource Management Trends	2
MGT 250	Leadership in Organizations	4
MGT 265	Negotiation Skills	3
MGT 290	Business Strategy and Policy Seminar	4
--	Technical Elective or Co-op	4
	<b>Total Credit Hours</b>	<b>104</b>

\*Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing, before taking a computer class.

\*\*Technical electives must total 6 credit hours. They can come from any combination of courses not already prescribed that use the following course codes: HRM, LSC, MGT, MKT, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080, ITS 081 or other college- prep- level course), NTK, OAD, RES.

\*\*\*ECO 110 is not acceptable for a social science elective; at least one humanities elective or one social science elective must be designated as a global awareness (GA) course.

\*\*\*\*ENG 135 will not necessarily transfer as the equivalent of ENG 112.

### LOGISTICS AND SUPPLY CHAIN MANAGEMENT OPTION

The Logistics and Supply Chain Management option provides a well-rounded education consisting of basic management courses enhanced with concentrated studies in purchasing, logistics, negotiation and inventory and materials management. The associate degree in Logistics and Supply Chain Management provides students with foundational knowledge and skills for managing the logistics and supply chain functions in a company's operations.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Students with significant business experience, where expertise equals or exceeds the outcomes of a particular course(s), are offered two options for earning experiential credit. Proficiency exams are available for selected courses. Other courses may allow a student to potentially earn credit through a portfolio presentation.

Students who would like to enhance a degree in any field or those who do not plan to complete an associate degree in Logistics and Supply Chain Management may select an abbreviated education by completing the course requirements for any of several certificate programs in Marketing and E-Business, Human Resources Management, Logistics and Supply Chain Management, Management, Small Business, Customer Service and Supervision. Courses taken completing these certificates can be counted in the relevant degree programs.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Logistics and Supply Chain Management, a graduate will be able to do the following:

- apply basic business and management concepts, skills and tools.
- effectively use communications and human relations knowledge and skills.

- analyze quantitative data.
- demonstrate understanding of social responsibility, ethical and legal issues.
- demonstrate understanding of international business issues.
- effectively use information technology skills in the business environment.
- effectively use knowledge and skills in inventory and materials management, purchasing and supply strategies, negotiation strategies and logistics and physical distribution.

### Degree Availability

The Logistics and Supply Chain Management program is available during the day and the evening. Students should consult with their advisor for the recommended sequencing of courses.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ITS 125	Beginning Spreadsheet*	1
ITS 103	Information Technology Basics*	3
MGT 105	Contemporary American Business	3
MTH 106	Business Mathematics	3
<b>Winter</b>		
ENG 135	Business Report Writing **** or	
ENG 112	English II	4
MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
MKT 200	Principles of Marketing	4
ITS 12P	Beginning Presentation Graphics*	1
<b>Spring</b>		
LSC 210	Purchasing & Supply Management	4
ENG 221	Business Communication	3
ITS 12D	Beginning Database*	1
MGT 202	Quality Management	4
MGT 268	Introduction to International Business	3
PSY 111	Psychology I	3

### Fall

LSC 220	Logistics & Physical Distribution	4
--	Technical Elective or EBE 100**	2
ECO 221	Principles of Macroeconomics	3
STT 264	Statistics I	4
--	Humanities/Social Science Elective (GA)***	3

### Winter

LSC 272	Operations & Supply Chain Management	5
COM 121	Public Speaking	3
MGT 260	Legal Environment of Business	3
MKT 240	Electronic Business Applications	4
--	Technical Elective or Co-op**	3

### Spring

LSC 275	Inventory & Materials Management	4
--	Technical Elective or Co-op**	2
MGT 265	Negotiation Skills	3
MGT 290	Business Strategy and Policy Seminar	4
--	Humanities/Social Science Elective***	3

Total Credit Hours 103

\*Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing, before taking a computer class.

\*\*Technical electives must total 7 credit hours. They can come from any combination of courses not already prescribed that use the following course codes: HRM, LSC, MGT, MKT, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080, ITS 081 or other college- prep- level course), NTK, OAD, RES.

\*\*\*ECO 110 is not acceptable for a social science elective; at least one humanities elective or one social science elective must be designated as a global awareness (GA) course.

\*\*\*\*ENG 135 will not necessarily transfer as the equivalent of ENG 112.

### MARKETING AND E-BUSINESS OPTION

The Marketing and E-Business option provides students with a well-rounded education. It includes a strong foundation in marketing and electronic business, highlighting each of the four "P's" to provide the knowledge and skills necessary for marketing and e-business management.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Students with significant business experience, where expertise equals or exceeds the outcomes of a particular course(s), are offered two options for earning experiential credit. Proficiency exams are available for selected courses. Other courses may allow a student to potentially earn credit through a portfolio presentation.

Students who would like to enhance a degree in any field or those who do not plan to complete an associate degree in Marketing and E-Business may select an abbreviated education by completing the course requirements for any of several certificate programs in Marketing and E-Business, Logistics and Supply Chain Management, Management, Small Business, Customer Service and Supervision. Courses taken completing these certificates can be counted in the relevant degree programs.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Marketing and E-Business, a graduate will be able to do the following:

- apply basic business and management concepts, skills and tools.
- effectively use communications and human relations knowledge and skills.
- analyze quantitative data.
- demonstrate understanding of social responsibility, ethical and legal issues.
- demonstrate understanding of international business issues.
- use information technology skills, including the use of Internet resources and tools.
- apply knowledge and skills in the four "P's" of marketing: product management, promotional strategies, pricing strategies and logistics & physical distribution.
- apply electronic business theories and concepts.

### Degree Availability

The Marketing and E-Business option is available during the day and in the evening. Students should consult with their advisor for the recommended sequencing of courses.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ITS 12S	Beginning Spreadsheet*	1
ITS 103	Information Technology Basics*	3
MGT 105	Contemporary American Business	3
MTH 106	Business Mathematics	3
<b>Winter</b>		
MKT 200	Principles of Marketing	4
ACC 112	Principles of Accounting II	4
ENG 221	Business Communication	3
MGT 112	Principles of Management	4
--	Humanities/Social Science Elective***	3
<b>Spring</b>		
ENG 135	Business Report Writing**** or	
ENG 112	English II	4
ITS 12D	Beginning Database*	1
MGT 106	Organizational Behavior	4
MGT 202	Quality Management	4
PSY 111	Psychology I	3
--	Technical Elective or EBE 100	2
<b>Fall</b>		
MKT 210	Pricing Strategies	4
MKT 215	Product Management	3
ITS 12P	Beginning Presentation Graphics*	1
LSC 220	Logistics & Physical Distribution	4
STT 264	Statistics I	4
--	Technical Elective or Co-op	2
<b>Winter</b>		
MKT 240	Electronic Business Applications	4
MKT 255	Promotion Strategies	4
COM 121	Public Speaking	3
ECO 221	Principles of Macroeconomics	3
MGT 260	Legal Environment of Business	3
<b>Spring</b>		
MKT 245	Sales and Sales Management	3
MGT 250	Leadership in Organizations	4
MGT 265	Negotiation Skills	3
MGT 290	Business Strategy and Policy Seminar	4
--	Humanities/Social Science Elective (GA)***	3
<b>Total Credit Hours</b>		<b>106</b>

\*Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

\*\*Technical electives must total 4 credit hours. They can come from any combination of courses not already prescribed that

use the following course codes: HRM, LSC ,MGT, MKT, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080, ITS 081 or other college- prep- level course), NTK, OAD, RES.

\*\*\*ECO 110 is not acceptable for a social science elective; at least one humanities elective or one social science elective must be designated as a global awareness (GA) course.

\*\*\*\*ENG 135 will not necessarily transfer as the equivalent of ENG 112.

## MANAGEMENT CERTIFICATE

The Management certificate provides students with an overview of the business environment and a background for understanding and managing people. It provides them with the foundational knowledge of accounting and financial issues needed by all managers. All courses taken for this certificate are applicable to the associate degree in Management.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

Course #	Course Title	Credit Hours
<b>Fall</b>		
MGT 105	Contemporary American Business	3
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ITS 103	Information Technology Basics*	3
MTH 106	Business Mathematics	3
<b>Winter</b>		
MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
ACC 112	Principles of Accounting II	4
ENG 135	Business Report Writing*** or	
ENG 112	English II	4
ITS 12S	Beginning Spreadsheet*	1
ITS 12P	Beginning Presentation Graphics*	1
<b>Spring</b>		
MGT 202	Quality Management	4
- -	Technical Elective**	3
ACC 113	Principles of Accounting III	4
COM 121	Public Speaking	3
ENG 221	Business Communication	3
ITS 12D	Beginning Database*	1
	<b>Total Credit Hours</b>	<b>53</b>

\*Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

\*\*Technical electives must total 3 credit hours. They can come from any combination of courses not already prescribed that use the following course codes: HRM, MGT, MKT, LSC, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080), NKT, OAD, RES.

\*\*\*ENG 135 will not necessarily transfer as the equivalent of ENG 112.

## MANAGEMENT DEPARTMENTAL CERTIFICATES

### CUSTOMER SERVICE CERTIFICATE

This certificate is focused on developing the essential skills and knowledge needed by anyone desiring to provide excellent service to customers-, both internal and external. This is particularly focused on meeting needs and expectations of an organization's customers. All courses can be applied to the associate degree in Management.

Course #	Course Title	Credit Hours
MGT 105	Contemporary American Business	3
MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
MGT 115	Customer Relations	3
MGT 202	Quality Management	4
MKT 200	Principles of Marketing	4
MKT 245	Sales/Sales Promotion	3
ITS 103	Information Technology Basics	3
PSY 111	Psychology I	3
	<b>Total Credit Hours</b>	<b>31</b>

### HUMAN RESOURCE MANAGEMENT CERTIFICATE

This certificate is focused on developing the essential knowledge and skills needed by an individual who wants to work in the human resource field. All courses can be applied to the Human Resource Management Option of the Associate Degree in Management.

Course #	Course Title	Credit Hours
HRM 225	Human Resource Management	3
HRM 230	Training and Development	3
HRM 235	Employment Law	3
HRM 240	Staffing	4
HRM 245	Compensation and Benefits	3
HRM 270	Human Resource Management Trends	2
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ENG 112	English II	4
ENG 135	Business Report Writing	4
ENG 221	Business Communication	3
ITS 103	Information Technology Basics	3
ITS 12P	Beginning Presentation Graphics	1
MGT 105	Contemporary American Business	3

MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
MGT 202	Quality Management	4
MGT 260	Legal Environment of Business	3
MGT 265	Negotiation Skills	3
MTH 106	Business Mathematics	3
STT 264	Statistics I	4
Total Credit Hours		69

ITS 103	Information Technology Basic	3
LSC 220	Logistics and Physical Distribution	4
MGT 105	Contemporary American Business	3
MGT 112	Principles of Management	4
MGT 202	Quality Management	4
MTH 106	Business Mathematics	3
STT 264	Statistics I	4
Total Credit Hours		50

### LOGISTICS AND SUPPLY CHAIN MANAGEMENT CERTIFICATE

This certificate is focused on developing essential knowledge and skills needed by an individual who wants to work in the acquisition and/or distribution of materials and products. All courses can be applied to the associate degree in Logistics and Supply Chain Management.

Course #	Course Title	Credit Hours
LSC 210	Purchasing and Supply Management	4
LSC 220	Logistics and Physical Distribution	4
LSC 272	Operations and Supply Chain Management	5
LSC 275	Inventory and Materials Management	4
ACC 111	Principles of Accounting I	4
ENG 111	English I	4
ENG 112	English II	4
ITS 12D	Beginning Database	1
ITS 12S	Beginning Spreadsheet	1
ITS 103	Information Technology Basics	3
MGT 105	Contemporary American Business	3
MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
MGT 202	Quality Management	4
MGT 260	Legal Environment of Business	3
MGT 265	Negotiation Skills	3
MTH 106	Business Mathematics	3
STT 264	Statistics I	4
Total Credit Hours		62

### MARKETING AND E-BUSINESS CERTIFICATE

This certificate is focused on developing the essential knowledge and skills needed by an individual who wants to work in the marketing field. All courses can be applied to the associate degree in Marketing and E-Business.

Course #	Course Title	Credit Hours
MKT 200	Principles of Marketing	4
MKT 210	Pricing Strategies	4
MKT 215	Product Management	3
MKT 240	Electronic Business Applications	4
MKT 255	Promotion Strategies	4
ACC 111	Principles of Accounting I	4
ITS 12D	Beginning Database	1
ITS 12S	Beginning Spreadsheet	1

### SMALL BUSINESS CERTIFICATE

This certificate is focused on developing the essential knowledge needed by an individual who wants to start a small business. It will provide the student with the necessary tools for developing a successful business operation. All courses can be applied to the associate degrees in Management or Marketing and E-Business.

Course #	Course Title	Credit Hours
MGT 105	Contemporary American Business	3
MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
MGT 214	Small Business Theory and Practice	4
MGT 202	Quality Management	4
MGT 250	Leadership in Organizations	4
MGT 260	Legal Environment of Business	3
MKT 200	Principles of Marketing	4
MKT 240	Electronic Business Applications	4
MKT 245	Sales/Sales Promotion	3
ACC 111	Principles of Accounting I	4
ACC 112	Principles of Accounting II	4
ENG 111	English I	4
ENG 112	English II	4
ITS 103	Information Technology Basics	3
Total Credit Hours		56

### SUPERVISORY CERTIFICATE

This certificate is focused on developing the essential skills and knowledge needed by first-line supervisors. It will provide an individual the tools with which to motivate, challenge and manage employees. All courses can be applied to the associate degree in Management.

Course #	Course Title	Credit Hours
MGT 105	Contemporary American Business	3
MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
MGT 202	Quality Management	4
HRM 225	Human Resource Management	3
MGT 250	Leadership in Organizations	4
ACC 111	Principles of Accounting I	4
ITS 103	Information Technology Basics	3
PSY 111	Psychology I	3
Total Credit Hours		32

# Medical Assisting

## MEDICAL ASSISTING

Medical Assistants (MAT) perform clinical and administrative tasks in physicians and other health practitioners' offices and inpatient and outpatient facilities. Specific duties vary from office to office depending on the location and size of the practice and the practitioner's specialty. Administrative duties include answering telephones, greeting patients, scheduling appointments and laboratory services, updating and filing patients' medical records, filling out insurance forms and handling billing and bookkeeping. Clinical duties include taking medical histories and recording vital signs, explaining procedures to patients, preparing patients for and assisting the physician during examinations, collecting and preparing laboratory specimens, sterilizing medical instruments, instructing patients on medications and special diets, preparing and administering medications as directed by a physician, drawing blood, taking electrocardiograms, removing sutures and changing dressings.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of the Medical Assisting associate degree, a graduate will be able to:

- coordinate and facilitate patient care throughout the ambulatory care setting.
- communicate effectively with patients, families, and members of the health care team.
- perform clerical functions necessary to maintain medical office appointments, transcription, and medical records.
- apply basic billing, collection, insurance, coding, and manage care guidelines needed to maintain office bookkeeping.
- collect, transport and process specimens.
- perform, assist, and follow up on diagnostic tests and procedures.
- provide patient care.
- instruct patients regarding health maintenance and disease prevention.
- apply legal and ethical concepts.

### Health and Directed Practice Requirements

All Medical Assisting students must meet health requirements prior to entering the directed practice course. A criminal background check and other requirements may be necessary depending on clinical site placement. All students are strongly encouraged to complete Hepatitis B immunizations prior to their second quarter in the Medical Assisting program.

### Liability Insurance

Students will be billed for liability insurance for the directed practice courses.

### Graduation Requirements

Student must pass all the required courses, have a cumulative average of 2.0 and must have a C as a minimum grade in BIO 105 and all MAS, MST and MLT courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
MAS 101	Orientation to Medical Assisting	2
MST 105	Medical Terminology	3
BIO 105	Fundamentals of Anatomy and Physiology	4
ITS 12W	Beginning Word Processing	1
MST 101	Introduction to Healthcare Delivery	3
MST 104	Foundations of Patient Care	3
<b>Winter</b>		
MAS 102	Medical Law & Ethics	2
MAS 103	Medical Administrative Office I	3
MAS 104	Exam Room Procedures I	4
ENG 111	English I	4
ITS 12S	Beginning Spreadsheet	1
MST 171	Introduction to Electrocardiography	3
<b>Spring</b>		
MAS 113	Medical Administrative Office II	3
MAS 114	Exam Room Procedures II	4
MAS 115	Laboratory Procedures for the Medical Office	2
MAS 116	Pharmacology for the Medical Office	2
MLT 116	Phlebotomy	2
MLT 117	Phlebotomy Lab	2
PSY 111	Psychology I	3
<b>Summer</b>		
MAS 117	Clinical Directed Practice	5
MAS 118	Clinical Perspectives Seminar	1
<b>Fall</b>		
MAS 210	Medical Assistant Exam Review	2
COM 111	Interpersonal Communication	3
ENG 112	English II	4
SOC 110	Sociology	3
<b>Winter</b>		
MAS 211	Advanced Clinical Skills	4
ENG 223	Technical Report Writing	or
ENG 221	Business Communication	3
----	Humanities/Social Science Elective (GA)	3



PSY 223	Lifespan Human Growth and Development	5	MLT 117	Phlebotomy Lab	2
			PSY 111	Psychology I	3
<b>Spring</b>			<b>Summer</b>		
MAS 212	Leadership and Management in the Medical Office	3	MAS 117	Clinical Directed Practice	5
MAS 213	Leadership and Management Directed Practice	1	MAS 118	Clinical Perspectives Seminar	1
----	Humanities/Social Science Elective (GA)	3	Total Credit Hours		
----	Technical Elective (See list below)*	4	57		
Total Credit Hours		95			

\*Please choose from the following courses to meet the Technical Elective requirement.

- OAD 270, CPT Coding (5)
- OAD 272, ICD-9 Coding (5)
- OAD 248, Basic Medical Machine Transcription (4)
- OAD 256, Medical Office Management (4)
- SWK 105, Chemical Dependency I (4)
- SWK 220, Social Services to Individuals with MR/DD (3)
- MAS 214 Advanced Insurance and Billing Procedures (4)

## MEDICAL ASSISTING CERTIFICATE

A one year certificate in Medical Assisting is also available for students who need a quicker entry into the job market. This will provide the student with the administrative and clinical skills needed for entry-level positions as a medical assistant. Students can fully apply this one-year certificate toward the completion of the Medical Assisting associate degree.

Course #	Course Title	Credit Hours
<b>Fall</b>		
MAS 101	Orientation to Medical Assisting	2
MST 105	Medical Terminology	3
BIO 105	Fundamentals of Anatomy and Physiology	4
ITS 12W	Beginning Word Processing	1
MST 101	Introduction to Healthcare Delivery	3
MST 104	Foundations of Patient Care	3
<b>Winter</b>		
MAS 102	Medical Law & Ethics	2
MAS 103	Medical Administrative Office I	3
MAS 104	Exam Room Procedures I	4
ENG 111	English I	4
ITS 12S	Beginning Spreadsheet	1
MST 171	Introduction to Electrocardiography	3
<b>Spring</b>		
MAS 113	Medical Administrative Office II	3
MAS 114	Exam Room Procedures II	4
MAS 115	Laboratory Procedures for the Medical Office	2
MAS 116	Pharmacology for the Medical Office	2
MLT 116	Phlebotomy	2

# Medical Laboratory

## MEDICAL LABORATORY TECHNOLOGY

Medical Laboratory (MLT) is a career opportunity in the laboratory. Two-year associate degree programs with supervised clinical experience in approved laboratories provide the opportunity to enter this challenging, ever-changing career.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult the MLT program advisor for help in planning their schedules.

### Learning Outcomes

Upon completion of an associate degree in Medical Laboratory, a graduate will be able to:

- write clearly and accurately in a variety of contexts and formats.
- verbally communicate clearly and accurately in a variety of contexts and formats.
- display professional characteristics.
- select and use appropriate, safe and effective tools to solve a variety of problems pertaining to collecting, handling and conducting tests on samples and to perform corrective and preventative maintenance on instruments.
- demonstrate the ability to think critically by assessing proper correlation between the results and predetermined values, by performing quality control activities, by relating laboratory results to common disease process and by drawing and defending reasonable conclusions.
- demonstrate an awareness of cultural diversity as pertaining to both patients and peers.

### Course Format

Each MLT course is composed of two required components—an online lecture component and a lab component, which may be taught at the College or another college-approved supervised site. Off campus lab sites for distance students must be secured by the student and approved by the MLT Program Director prior to entry into the program. A suitable directed practice site is found for each student in the program by the MLT Program Director with the assistance of the Health and Human Services Division of Clark State Community College.

### Scholastic Preparation

Entry into the program is on a space-limited basis. Students must petition for admission. To be eligible to petition, students must successfully complete reading, math and algebra placement tests or obtain a grade of C or better on the appropriate college preparatory (CPE) course.

## Health and Clinical Requirements

All Medical Laboratory Technology students must meet health requirements by the beginning of the fifth quarter that the student is in the program in order to meet requirements for the directed practice course. Specific information will be provided prior to the directed practice course.

Distance students completing lab courses in clinical agencies will be required to complete health requirements prior to their first lab course.

A criminal background check and other requirements may be necessary depending on clinical site placement.

All students are strongly encouraged to complete Hepatitis B immunizations prior to entry into the first MLT course.

Applicants must be physically and emotionally able to fulfill the functions of the medical laboratory technician.

### Liability Insurance

Students will be billed for liability insurance for each year of courses.

### Graduation Requirements

To qualify for an associate degree, a Medical Laboratory student must pass all the required courses, have a cumulative average of 2.0 and must have a C as a minimum grade in all the technical courses of the program.

### Certification

Upon completion of the accredited program, graduates are eligible to take the national certifying examination. This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Ave., Suite 670, Chicago, Illinois, 60631; telephone 773.714.8880; [www.naacls.org](http://www.naacls.org).

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

### Transfer Options

Students enrolled in the Medical Laboratory Technology, Associate of Applied Science degree are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of college or universities have designed baccalaureate completion programs for students completing applied degrees. Local programs include:

- Franklin University's Bachelor of Science in Healthcare Management
- Urbana University's Bachelor of Science in Healthcare Management
- University of Cincinnati's Bachelor of Science in Clinical Laboratory Science

See the transfer section of the catalog and your academic advisor for more information.

**Course #      Course Title                      Credit Hours**

**Fall and Winter**

MLT 101	Medical Laboratory Orientation	2
MLT 102	Medical Laboratory Orientation Lab	1
MLT 111	Chemistry for Technicians	3
MLT 116	Phlebotomy	2
MLT 117	Phlebotomy Laboratory	2
BIO 105	Fundamentals of Anatomy and Physiology	4
ENG 111	English I	4

**Winter and Spring**

MLT 123	Medical Microbiology I	3
MLT 124	Medical Microbiology I Lab	2
MLT 131	Clinical Chemistry	3
MLT 132	Clinical Chemistry Lab	3
ENG 112	English II	4
ITS 103	Information Technology Basics	3

**Spring and Summer**

MLT 125	Hematology I	3
MLT 126	Hematology I Lab	3
MLT 135	Urinalysis and Body Fluids	2
MLT 136	Urinalysis and Body Fluids Lab	2
COM 111	Interpersonal Communication	3
PSY 111	Psychology I	3

**Summer and Fall**

MLT 211	Immunology	3
MLT 212	Immunology Lab	1
MLT 213	Medical Microbiology II	3
MLT 214	Medical Microbiology II Lab	3
ENG 221	Business Communication	3
- -	Humanities/Social Science Elective(GA)	3

**Fall and Winter**

MLT 223	Hematology II	3
MLT 224	Hematology II Lab	3
MLT 226	Immunochemistry	4
MLT 227	Immunochemistry Lab	4
- -	Humanities/Social Science Elective	3

**Winter and Spring**

MLT 270	MLT Review & Update	4
MLT 280	Directed Practice	8
MLT 290	Seminar	4

Total Credit Hours                      101

# Multi-Skilled Health Care

## MULTI-SKILLED HEALTH CARE CERTIFICATE

The Multi-Skilled Health Care certificate program is designed for individuals who are currently working in health care or who wish to enter the health care field. This program provides an introduction to the health care environment and provides training in more than one health care skill in order to meet the ever changing needs of the health care delivery system. Upon completion of this certificate students will have the skills needed to obtain employment in a variety of health care settings.

Students complete core courses and select courses from different specialty areas. The flexibility of the program allows students to choose specialty courses that meet their individual interests and needs. Many of these specialty areas have national certification or state licensure. Students who complete these specialty courses will be eligible to sit for the appropriate certification or licensure examinations.

Courses within this program can also be taken by students in other degree or certificate programs and by health care professionals who wish to expand their knowledge/skills and/or increase marketability for employment.

Many of the courses within this program also meet course requirements for a variety of the College's associate degree programs. Students who wish to complete an associate degree may also choose the associate of technical studies option to select the courses which match their interests and/or career goals.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Non-academic requirements:

- must meet specified health requirements prior to enrolling in clinical or directed practice courses.
- will be billed for liability insurance when registering for specified clinical or directed practice courses.
- may be required to obtain a criminal background check prior to enrolling in specified clinical or directed practice courses.

Students should also be aware that clinical/directed practice sites may also require:

- random drug screening.
- HIV testing, if exposed to blood-borne pathogens.
- submission to treatment/counseling, if exposed to infectious diseases.

## Certificate Requirements

To qualify for a certificate in Multi-Skilled Health Care students must pass all required courses, must obtain a grade of C or better in all technical courses and have a minimum cumulative GPA of 2.0.

Course #	Course Title	Credit Hours
<b>Fall</b>		
MST 101	Introduction to Health Care	3
MST 104	Foundations of Client Care	3
MST 105	Medical Terminology	3
EMS 171	Basic Life Support (Professional CPR)	1
--	Technical Elective(s)*	6
<b>Winter</b>		
BIO 105	Fundamentals of Anatomy and Physiology	4
ENG 111	English I	4
PSY 111	Psychology I	3
ITS 103	Information Technology Basics	3
--	Technical Elective(s)*	4
<b>Spring</b>		
SWK 136	Affective Education**	4
--	Basic or Humanities/Social Science Elective***	3
--	Basic or Humanities/Social Science Elective***	3
--	Technical Elective(s)*	8
<b>Total Credit Hours</b>		<b>52</b>

\*Students must choose a total of 18 credit hours of technical elective course work from the following specialty areas. Students must choose courses from at least two different areas and should verify that course prerequisites have been met prior to registering for a course.

### Diagnostic Procedures

- MLT 116 Phlebotomy (2 credits) (must also register for MLT 117)
- MLT 117 Phlebotomy Lab (2 credits) (must also register for MLT 116)
- MST 171 Principles of Electrocardiography (3 credits)

### Direct Patient Care

- MST 181 Nurse Aide Training (6 credits)
- MST 182 Patient Care Technician (4 credits)
- LPN 108 Basic Nutrition and Diet Therapy (2 credits)

### Emergency Care

- EMS 110 Health and Health Emergencies (3 credits)
- EMS 100 EMT-Basic (8 credits)
- EMS 250 EMS Legal Insights (2 credits) (must have EMT Basic certification)

### Chemical Dependency

- SWK 105 Chemical Dependency I: Pharmacology/ Physiology of Psychoactive Substances (4 credits)
- SWK 205 Chemical Dependency II: Counseling Techniques (4 credits)
- SWK 217 Chemical Dependency III: Special Populations (4 credits)

### Other Technical Electives

- EBE 100 Employability Skills (2 credits)
- SWK 220 Social Services to Individuals with MR/DD (3 credits)
- OAD 135 Office Procedures (4 credits)
- MST - - Special Topics in Health Care (1-3 credits)

\*\*May take COM 111 Interpersonal Communications (3 credit hours) instead of SWK 136 Affective Education.

\*\*\*Please choose from the following courses for your Basic or Humanities/Social Science electives:

- BIO 131 Microbiology (4 credits)
- PSY 112 Psychology II (3 credits)
- SOC 110 Sociology (3 credits)
- SPN 100 Survival Spanish I (3 credits)
- SPN 102 Survival Spanish II (3 credits)
- PHL 230 Medical Ethics\*\*\*\* (3 credits)
- PSY 221 Human Growth and Development I\*\*\*\* (3 credits) or PSY 223 Lifespan Human Growth and Development \*\*\*\* (5 credits)
- SOC 220 Comparing Cultures\*\*\*\* (3 credits)
- SOC 230 Social Problems\*\*\*\* (3 credits)
- SOC 240 Racial and Cultural Minorities\*\*\*\* (3 credits)

\*\*\*\*Note: Due to the writing intensive nature of these courses, the student must have already completed or be concurrently enrolled in ENG 112-English II to enroll in these courses.

### HEALTH CARE DEPARTMENTAL CERTIFICATES

Various departmental certificates are available for students who want to obtain skills in one specialty health area. These certificates can be applied for through the Health and Human Services Division Office in the Applied Science Center and include:

#### CHEMICAL DEPENDENCY CERTIFICATE

See Social Services

#### ELECTROCARDIOGRAPHY CERTIFICATE

This certificate/area of specialization is focused on providing students with the basic knowledge and skills needed to perform an electrocardiogram (ECG). Knowledge and skills learned will include basic cardiac anatomy and physiology, basic ECG interpretation, identification of common abnormal tracings and equipment operation, troubleshooting and recording of rhythm strips and multi-lead ECGs. All courses

can be applied to the Multi-Skilled Health Care one-year certificate program. Courses can also enhance the skills of students in the associate degree nursing programs.

Course #	Course Title	Credit Hours
MST 105	Medical Terminology	3
BIO 105	Fundamentals of Anatomy and Physiology	4
EMS 171	Basic Life Support (Professional CPR)	1
MST 171	Introduction to Electrocardiography	3
Total Credit Hours		11

#### EMT-BASIC CERTIFICATE

See Emergency Medical Services

#### EMT-INTERMEDIATE CERTIFICATE

See Emergency Medical Services

#### EMT-PARAMEDIC CERTIFICATE

See Emergency Medical Services

#### NURSE AIDE CERTIFICATE

The Nurse Aide Training course is a six credit-hour course that incorporates both classroom and skills lab instruction and includes 24 clinical hours in a long-term care facility at the end of the course. Students must complete specific health requirements prior to participating in clinical and will be billed for liability Insurance when registering for the course.

Successful completion of this course within two years of entry into the first clinical nursing course of the LPN and RN programs meets the prerequisite nurse aide requirement of these programs. After completing the course, students are eligible to sit for the written and skills state certification test. Successful completion of the state certification test is an employment requirement for hire as a nurse aide in Ohio's long-term care facilities.

Course #	Course Title	Credit Hours
MST 181	Nurse Aide Training	6

#### PATIENT CARE TECHNICIAN CERTIFICATE

This certificate/area of specialization is focused on providing students with the skills needed to provide direct patient care to clients in acute care settings under the direction and supervision of a registered nurse. All courses can be applied to the Multi-Skilled Health Care one-year certificate program.

Course #	Course Title	Credit Hours
MST 101	Introduction to Health Care	3

MST 104	Foundations of Client Care	3
ITS 103	Information Technology Basics	3
EMS 171	Basic Life Support (Professional CPR)	1
MST 181	Nurse Aide Training*	6
MST 105	Medical Terminology	3
BIO 105	Fundamentals of Anatomy and Physiology	4
MST 182	Patient Care Technician*	4
	Total credit hours	27

\*Students must complete specific health requirements prior to participating in clinical; will be billed for liability insurance when registering for the course; and may be required to obtain a criminal background check based on clinical site requirements.

### **PHLEBOTOMY CERTIFICATE**

This certificate/area of specialization provides students with the knowledge and skill to collect blood samples by venipuncture and skin puncture. All courses can be applied to the Multi-Skilled Health Care one-year certificate program and the Medical Laboratory Technology associate degree program. Courses can also enhance the skills of students enrolled in the associate degree nursing programs.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
MST 105	Medical Terminology*	3
MLT 116	Phlebotomy	2
MLT 117	Phlebotomy Lab	2
	Total credit hours	7

\*Students accepted to or enrolled in the Medical Laboratory Technology associate degree program should take MLT 101 and MLT 102 instead of MST 105.

# Nursing

## NURSING TRANSITION LPN TO RN

This nursing sequence is a four-quarter modification to meet the educational needs of the licensed practical nurse that wishes to become a registered nurse. Other course requirements remain the same as in the two-year Registered Nursing program. The program is accredited by the National League for Nursing Accrediting Commission and approved by the Ohio Board of Nursing. Graduates are prepared to function in beginning staff-level registered nurse positions in hospitals, extended care facilities, clinics and comparable health care facilities as members of a health care team.

### Learning Outcomes

Upon completion of an associate degree in Registered Nursing, a graduate will be able to:

- communicate effectively with patients, families and other healthcare providers.
- demonstrate behaviors that reflect respect for and sensitivity to individual differences while working with, families and other health care providers.
- manage nursing care for individuals and small groups of clients with common and recurring health problems.
- use the nursing process to provide holistic care for individuals across the life cycle.
- use critical thinking and problem solving skills to make nursing care decisions.
- develop and implement health teaching plans for individuals and small groups to assist them in achieving maximum health potential.
- display professional behaviors and practice within the ethical/legal framework of nursing.

### Course Format

Required courses are presented in both a traditional lecture format and an online format. (Online offering is dependent on sufficient demand for this format.) All lab sessions are conducted on campus and/or at a health care facility, regardless of the format. Contact your nursing advisor for further information on online courses.

### Scholastic Preparation

The number of students that can be admitted to the program each year is restricted due to the limited availability of clinical sites. Students must petition for admission. All applicants are considered for admission by the date their petitioning request was granted and the date in which they complete the pre-requisite courses/requirements.

The admission requirements include:

- a minimum COMPASS reading score of 75. If the student does not obtain a 75, he/she is required to take and pass with a grade of C or better the appropriate college preparatory course(s) (CPE 061 and/or CPE 062). Students are excused from taking the reading placement test if

they have taken the ACT or SAT exam within the last three years and received English scores of greater than or equal to 20 on the ACT and 500 on the SAT or have obtained a C or better in a college-level English course.

- a minimum COMPASS score of 47 on Basic Math and 29 on the Algebra test. If the student does not obtain the required scores, he/she must take and pass with a grade of C or better the appropriate college preparatory course(s) (CPE 091 and/or CPE 101). Students are excused from taking the math/algebra placement test if they have taken the ACT or SAT exam within the last three years and received mathematics scores of 22 on the ACT or 560 on the SAT or received a C or better in a college level math course within the past three years.
- recent (within past 5 years) completion of either one unit of high school chemistry or a college chemistry course (CHM 115, Introduction to General Chemistry or CHM 114 Introduction to General Chemistry Review or the equivalent) with a grade of C or better. This prerequisite is waived for those students who have completed BIO 121, 122, and 123, the Anatomy & Physiology sequence, or the equivalent with a grade of C or better within the past five years.
- a cumulative grade point average of 2.0 or greater in the required courses in the curriculum.
- licensure as practical nurse (LPN) for at least one year.
- current practice as a LPN. (Minimum of one year within the past three years).
- current professional CPR provider certification.
- satisfactory completion of NUR 114 - Dosage Calculations
- Proficiency test or course within the two years prior to admission into NUR 175, the transition nursing course.
- completion of the prerequisite course requirements for NUR 175, the transition nursing course.

Additional information about admission requirements can be obtained from the RN Program Coordinator.

### Licensure

Upon completion of the program, the graduate is eligible to apply to take the NCLEX-RN examination. Licensure is mandatory for practice as a RN. Candidates for licensure in Ohio must disclose information related to any misdemeanor committed in the course of practice, prior felony, crime involving gross immorality or moral turpitude, violation of a drug law and/or recent diagnosis or treatment of a psychotic disorder. The Ohio Board of Nursing will determine whether the candidate may take the licensing exam.

### Clinical Requirements

Transition students must meet health and criminal background check requirements before entering the first clinical nursing course. Specific information will be provided prior to beginning the nursing transition course.

Students will be billed for liability insurance for the clinical courses.

### Graduation Requirements

To qualify for an associate degree, Transition students must pass all the required courses, have a cumulative average of 2.0 and have a C as a minimum grade in each anatomy and physiology course and in all of the nursing (NUR) courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

### Transfer Options

Students enrolled in the Associate of Applied Science degree in Nursing are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree in nursing. A number of colleges and universities have designed baccalaureate nursing completion programs for students who have completed their associate degree in nursing and are licensed registered nurses. Local programs include:

- Wright State University
- Urbana University

See the transfer section of the catalog and your academic advisor for more information.

Course #	Course Title	Credit Hours
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#### Fall

NUR 114	Dosage Calculations	1
BIO 121	Anatomy and Physiology I**	4
ENG 111	English I	4
PSY 111	Psychology I	3

#### Winter

BIO 122	Anatomy and Physiology II**	4
ENG 112	English II	4
ITS 103	Information Technology Basics	3
COM 111	Interpersonal Communications	3

#### Spring

BIO 123	Anatomy and Physiology III**	4
BIO 131	Microbiology**	4
PSY 223	Lifespan Human Growth and Development**	5

#### Spring or Summer

NUR 175	Transition to Registered Nursing*	4
NUR 200	Service Learning Project ***	1

\*Recognition of competency achievement equivalent to 20 nursing credit hours will be given for advanced placement after successful completion of NUR 175.

#### Summer or Fall

NUR 274	Nursing IV	5
NUR 275	Nursing V	5

ENG 223	Technical Report Writing	3
SOC 110	Sociology	3

#### Fall or Winter

NUR 276	Nursing VI	11
- -	Humanities/Social Science Elective	3

#### Winter or Spring

NUR 267	Nursing VII	4
NUR 265	Nursing VIII	5
NUR 266	Directed Nursing Practice	2
NUR 281	Nursing Comprehensive Review Seminar	2

Total Credit Hours 107

\*\*BIO 121, BIO 122, BIO 123, BIO 131 and PSY 223 must be successfully completed within ten years of entry into the first clinical nursing course. If older than ten years, the course must be repeated. A grade of C or better is required for successful completion of BIO 121, BIO 122 and BIO 123.

\*\*\*NUR 200 may be taken with NUR 175 and must be completed prior to enrolling in the final quarter of nursing courses.

### PRACTICAL NURSING CERTIFICATE

The 12-month Practical Nursing Certificate is approved by the Ohio Board of Nursing and the Ohio Board of Regents. The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals may require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

#### Learning Outcomes

Upon completion of this program of practical nurse education, the graduate will be able to:

- contribute to the data collection of the health care client from newborn through aged within prescribed settings.
- within the legal scope of practice for the Practical Nurse, participate in the planning, implementation and evaluation of nursing care using the nursing process.
- provide safe nursing care in prescribed situations using nursing skills and principles from the biological and behavioral sciences.
- report and document significant findings of the client's condition to the appropriate individual in a timely manner.
- identify health care learning needs of assigned clients and assist in teaching the health care client.
- function as an active member of the nursing care team and assume responsibility for continuing growth in nursing knowledge and skills.
- demonstrate a code of behavior based on ethical principles and an understanding of the legal scope of practice of the Practical Nurse.



### Scholastic Preparation

The number of students that can be admitted to the program each year is restricted due to the limited availability of clinical sites. All applicants are considered for admission by the date in which they complete all petitioning prerequisites and file a petition online at <http://www.clarkstate.edu/petitions.html> to be placed on the waiting list.

To be eligible to petition to the Practical Nursing program, the student must have:

- a minimum COMPASS reading score of 75. If the student does not obtain a 75, he/she is required to take and pass with a grade of C or better the appropriate college preparatory course (CPE 061 and/or CPE 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last three years and received English scores of greater than or equal to 20 on the ACT and 500 on the SAT or have obtained a C or better in a college-level English course.
- a minimum COMPASS score of 47 on Basic Math and 29 on the Algebra test. If the student does not obtain the required scores, he/she must take and pass with a grade of C or better the appropriate college preparatory course(s) (CPE 091 and/or CPE 101). Students are excused from taking the math placement if they have taken the ACT or SAT exam within the last three years and received mathematics scores of 22 on the ACT or 560 on the SAT or received a C or better in a college-level math course within the past three years.
- a GPA of greater than or equal to 2.0 in the courses pertaining to the identified nursing major.

### Licensure

Upon completion of the program, the graduate may apply to the Ohio Board of Nursing to take the NCLEX-PN Examination. Candidates for licensure in Ohio must disclose information related to any prior felony, any crime involving gross immorality or moral turpitude, any violation of a drug law and/or recent diagnosis or treatment of a psychotic disorder. The Ohio Board of Nursing will determine whether the candidate may take the licensing exam.

### Clinical Requirements

Prior to entering the first clinical nursing course (LPN 160), students must have current professional CPR provider status and must also have current state-tested nurse aide credentials and/or have satisfactorily completed MST 181 or its equivalent within the past two years. Please contact your nursing advisor for further information about these requirements.

Practical Nursing students must also meet health and criminal background check requirements before they enter the first clinical nursing course. Specific information will be presented at orientation after acceptance into the Practical Nursing program.

Students will be billed for liability insurance for the clinical courses.

### Graduation Requirements

To qualify for a certificate in Practical Nursing, students must have a cumulative average of 2.0 and must have a C as a minimum grade in BIO 105 and all LPN courses.

Course #	Course Title	Credit Hours
<b>Summer</b>		
NUR 114	Dosage Calculations	1
MST 105	Medical Terminology	3
BIO 105	Fundamentals of Anatomy and Physiology*	4
ENG 111	English I	4
ITS 12W	Beginning Word Processing	1
PSY 111	Psychology I	3
<b>Fall</b>		
PSY 223	Lifespan Human Growth and Development*	5
LPN 108	Nutrition and Diet Therapy	2
LPN 125	Introduction to Disease Processes	4
LPN 130	Nursing Trends I	2
LPN 160	Fundamentals of Nursing I	6
<b>Winter</b>		
LPN 146	Pharmacology for Practical Nurses	4
LPN 171	Fundamentals of Nursing II	6
LPN 182	Women's Health and Obstetric Nursing	2.5
LPN 151	Pediatric Nursing	3.5
<b>Spring</b>		
LPN 190	Medical-Surgical Nursing	14
Total Credit Hours		65

\*BIO 105 and PSY 223 must be successfully completed within ten years of entry into the first "LPN" course. If older than ten years, the course must be repeated. A grade of C or better is required for successful completion of BIO 105.

### PRACTICAL NURSING CERTIFICATE - EVENING WEEKEND

The Practical Nursing program also offers an evening-weekend option. This option allows students who are unable to attend school on a full-time basis during the day another option for certificate completion. Students can enroll on a part-time basis, taking less than 12 credit hours during all except the last quarter of the program. Students are required to enroll in 14 credit hours during the last quarter in order to complete the program. The program entrance requirements, learning outcomes, curriculum and clinical, graduation and licensure requirements are the same as listed for the full-time program. The program schedule that follows is designed

for students who have completed all prerequisites and who have no college preparatory recommendations.

Course #	Course Title	Credit Hours
<b>Winter</b>		
MST 105	Medical Terminology	3
ENG 111	English I	4
ITS 12W	Beginning Word Processing	1
<b>Spring</b>		
BIO 105	Fundamentals of Anatomy and Physiology*	4
PSY 111	Psychology I	3
<b>Summer</b>		
LPN 108	Nutrition and Diet Therapy	2
LPN 125	Introduction to Disease Processes	4
LPN 130	Nursing Trends I	2
NUR 114	Dosage Calculations	1
<b>Fall</b>		
PSY 223	Lifespan Human Growth and Development*	5
LPN 146	Pharmacology for Practical Nurses	4
<b>Winter</b>		
LPN 160	Fundamentals of Nursing I	6
LPN 182	Women's Health and Obstetric Nursing	2.5
<b>Spring</b>		
LPN 171	Fundamentals of Nursing II	6
LPN 151	Pediatric Nursing	3.5
<b>Summer</b>		
LPN 190	Medical-Surgical Nursing	14
	<b>Total Credit Hours</b>	<b>65</b>

\*BIO 105 and PSY 223 must be successfully completed within ten years of entry into the first "LPN" course. If older than ten years, the course must be repeated. A grade of "C" or better is required for successful completion of BIO 105.

## REGISTERED NURSING

The Registered Nursing program is a seven-quarter associate degree program that is accredited by the National League for Nursing Accrediting Commission and approved by the Ohio Board of Nursing. Graduates are prepared to function in beginning staff-level registered nurse positions in hospitals, extended care facilities, clinics and comparable health care facilities as members of a health care team.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory requirements. Many individuals, especially part-time students and those taking

college preparatory education courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

## Learning Outcomes

Upon completion of an associate degree in Registered Nursing, a graduate will be able to:

- communicate effectively with patients, families and other healthcare providers.
- demonstrate behaviors that reflect respect for and sensitivity to individual differences while working with patients, families and other health care providers.
- manage nursing care for individuals and small groups of clients with common and recurring health problems.
- use the nursing process to provide holistic care for individuals across the life cycle.
- use critical thinking and problem solving skills to make nursing care decisions.
- develop and implement health teaching plans for individuals and small groups to assist them in achieving maximum health potential.
- display professional behaviors and practice within the ethical/legal framework of nursing.

## Course Format

Required courses are presented in both a traditional lecture format and an online format. (Online offering is dependent on sufficient demand for this format.) All lab sessions will be conducted on campus and/or at a healthcare facility, regardless of the format. Contact your nursing advisor for further information on online courses.

## Scholastic Preparation

The number of students that can be admitted to the program each year is restricted due to the limited availability of clinical sites. All applicants are considered for admission by the date in which they complete all petitioning prerequisites and file a petition online at <http://www.clarkstate.edu/petitions.html> to be placed on the waiting list.

To be eligible to petition to the Registered Nursing program, the student must have:

- a minimum COMPASS reading score of 75. If the student does not obtain a 75, he/she is required to take and pass with a grade of C or better the appropriate college preparatory course (CPE 061 and/or CPE 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last three years and received English scores of greater than or equal to 20 on the ACT and 500 on the SAT or have obtained a C or better in a college-level English course.
- a minimum COMPASS score of 47 on Basic Math and 29 \ on the Algebra test. If the student does not obtain the required scores, he/she must take and pass with a grade of C or better the appropriate college preparatory course(s) (CPE 091 and/or CPE 101). Students are excused from taking the math placement test if they have taken

the ACT or SAT exam within the last three years and received mathematics scores of 22 on the ACT or 560 on the SAT or received a C or better in a college-level math course within the past three years).

- a recent (within past five years) grade of C or better in either high school chemistry or a college chemistry course (CHM 115, Introduction to General Chemistry, CHM 114, Introduction to General Chemistry Review or the equivalent).
- a GPA of greater than or equal to 2.0 in the courses pertaining to the identified nursing major.

In order to be accepted into the clinical nursing courses, the student must maintain a 2.0 cumulative grade point average in the required courses in the curriculum while on the waiting list. College preparatory courses and other courses, which are not listed as part of the curriculum are not included in calculating the GPA. If the student does not maintain a 2.0 GPA, his or her name will be removed from the waiting list.

While students are waiting to be accepted into the clinical nursing courses, they may take any of the non-nursing courses in the curriculum. Entry into clinical nursing courses occurs once a year in the fall. Initial acceptance letters for fall entry are mailed out in February, and the acceptance process continues until all the openings are filled. Initially, students are accepted based on the date their name was placed on the waiting list. If additional openings remain after the responses from the initial acceptance mailing are returned, subsequent acceptance is more selective and based on completion of selected non-clinical nursing courses in addition to the GPA requirement and the date the student's name was placed on the waiting list.

### Clinical Requirements

Prior to entering the first clinical nursing course (NUR 170), students must have current professional CPR provider status. Students must also have current state-tested nurse aide credentials and/or satisfactorily completed MST 181 or its equivalent within the past two years. Please contact your nursing advisor for further information about these requirements.

Registered Nursing students must also meet health and criminal background check requirements before they enter the first clinical nursing course. Second-year students must update health requirements prior to taking clinical courses. Specific information will be presented at orientation after acceptance into the Registered Nursing program.

Students will be billed for liability insurance for each year of clinical courses.

### Licensure

Upon completion of the program, the graduate is eligible to apply to take the NCLEX-RN examination. Licensure is mandatory for practice as a RN. Candidates for licensure in

Ohio must disclose information related to any misdemeanor committed in the course of practice, prior felony, crime involving gross immorality or moral turpitude, violation of a drug law and/or recent diagnosis or treatment of a psychotic disorder. The Ohio Board of Nursing will determine whether the candidate may take the licensing exam.

### Graduation Requirements

To qualify for an associate degree, Registered Nursing students must pass all the required courses, have a cumulative average of 2.0 and have a C as a minimum grade in each anatomy and physiology course and in all of the nursing (NUR) courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

### Transfer Options

Students enrolled in the Associate of Applied Science degree in Nursing are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree in nursing. A number of colleges and universities have designed baccalaureate nursing completion programs for students who have completed their associate degree in nursing and are licensed registered nurses. Local programs include:

- Wright State University
- Urbana University

See the transfer section of the catalog and your academic advisor for more information.

Course #	Course Title	Credit Hours
<b>Summer</b>		
MST 105	Medical Terminology	3
BIO 121	Anatomy & Physiology I*	4
ENG 111	English I	4
ITS 103	Information Technology Basics	3
COM 111	Interpersonal Communications	3
NUR 114	Dosage Calculations 1	
<b>Fall</b>		
NUR 110	Nursing Academic Success Seminar	1
NUR 170	Nursing I	6
BIO 122	Anatomy and Physiology II*	4
ENG 112	English II	4
PSY 111	Psychology I	3
<b>Winter</b>		
NUR 200	Service Learning Project**	1
NUR 171	Nursing II	6
BIO 123	Anatomy and Physiology III*	4
PSY 223	Lifespan Human Growth and Development*	5

### Spring

NUR 120	Pharmacology	3
NUR 172	Nursing III	8
BIO 131	Microbiology*	4
SOC 110	Sociology	3

### Fall

NUR 274	Nursing IV	5
NUR 275	Nursing V	5
ENG 223	Technical Report Writing	3

### Winter

NUR 276	Nursing VI	11
- -	Humanities/Social Science Elective	3

### Spring

NUR 267	Nursing VII	4
NUR 265	Nursing VIII	5
NUR 266	Directed Nursing Practice	2
NUR 281	Nursing Comprehensive Review Seminar	2

Total Credit Hours 110

\*BIO 121, BIO 122, BIO 123, BIO 131 and PSY 223 must be successfully completed within ten years of entry into the first clinical nursing course. If older than ten years, the course must be repeated. A grade of C or better is required for successful completion of BIO 121, BIO 122 and BIO 123.

\*\*NUR 200 may be taken after completing NUR 170 and must be completed prior to enrolling in the final quarter of nursing courses.

## REGISTERED NURSING - EVENING

A six-quarter sequence of nursing courses is offered as an evening program. Because the nursing course schedule does not allow options for other evening classes at the same time, all other required courses should be completed before a student enrolls in the first evening nursing (NUR) course.

The Registered Nursing program is accredited by the National League for Nursing Accrediting Commission and approved by the Ohio Board of Nursing. Graduates are prepared to function in beginning staff-level registered nurse positions in hospitals, extended care facilities, clinics and comparable health care facilities as members of a health care team.

The program schedule that follows is designed for part-time students who have completed all prerequisites and who have no college preparatory recommendations. Individuals taking college preparatory courses will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

## Learning Outcomes

Upon completion of an associate degree in Registered Nursing, a graduate will be able to:

- communicate effectively with patients, families and other healthcare providers.
- demonstrate behaviors that reflect respect for and sensitivity to individual differences while working with patients, families and other health care providers.
- manage nursing care for individuals and small groups of clients with common and recurring health problems.
- use the nursing process to provide holistic care for individuals across the life cycle.
- use critical thinking and problem solving skills to make nursing care decisions.
- develop and implement health teaching plans for individuals and small groups to assist them in achieving maximum health potential.
- display professional behaviors and practice within the ethical/legal framework of nursing.

## Course Format

Required courses are presented in both a traditional lecture format and an online format. (Online offering is dependent on sufficient demand for this format.) All lab sessions will be conducted on campus and/or at a healthcare facility, regardless of the format. Contact your nursing advisor for further information on online courses.

## Scholastic Preparation

The number of students that can be admitted to the program each year is restricted due to the limited availability of clinical sites. All applicants are considered for admission by the date in which they complete all petitioning prerequisites and file a petition online at <http://www.clarkstate.edu/petitions/html> to be placed on the waiting list.

To be eligible to petition to the Registered Nursing program, the student must have:

- a minimum COMPASS reading score of 75. If the student does not obtain a 75, he/she is required to take and pass with a grade of C or better the appropriate college preparatory course (CPE 061 and/or CPE 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last three years and received English scores of greater than or equal to 20 on the ACT and 500 on the SAT or have obtained a C or better in a college-level English course.
- a minimum COMPASS score of 47 on Basic Math and 29 on the Algebra test. If the student does not obtain the required scores, he/she must take and pass with a grade of C or better the appropriate college preparatory course(s) (CPE 091 and/or CPE 101). Students are excused from taking the math placement test if they have taken the ACT or SAT exam within the last three years and received mathematics scores of 22 on the ACT or 560 on the SAT or received a C or better in a college-level math course within the past three years).

- a recent (within past five years) grade of C or better in either high school chemistry or a college chemistry course (CHM 115, Introduction to General Chemistry or CHM 114, Introduction to General Chemistry Review or the equivalent).
- a GPA of greater than or equal to 2.0 in the courses pertaining to the identified nursing major.

In order to be accepted into the clinical nursing courses, the student must maintain a 2.0 cumulative grade point average in the required courses in the curriculum while on the waiting list. College preparatory courses and other courses, which are not listed as part of the curriculum, are not included in calculating the GPA. If the student does not maintain a 2.0 GPA, his or her name will be removed from the waiting list.

While students are waiting to be accepted into the clinical nursing courses, they may take any of the non-nursing courses in the curriculum. Entry into clinical nursing courses occurs once a year in the fall. Initial acceptance letters for fall entry are mailed out in February and the acceptance process continues until all the openings are filled. Students are accepted based on the date their name was placed on the waiting list and completion of the non-clinical nursing courses prior to entry into the clinical nursing courses.

### Clinical Requirements

Prior to entering the first clinical nursing course (NUR 170), students must have current professional CPR provider status. Students must also have current state-tested nurse aide credentials and/or satisfactorily completed MST 181 or its equivalent within the past two years. Please contact your nursing advisor for further information about these requirements.

Registered Nursing students must also meet health and criminal background check requirements before they enter the first clinical nursing course. Second-year students must update health requirements prior to taking clinical courses. Specific information will be presented at orientation after acceptance into the Registered Nursing program.

Students will be billed for liability insurance for each year of clinical courses.

### Licensure

Upon completion of the program, the graduate is eligible to apply to take the NCLEX-RN examination. Licensure is mandatory for practice as a RN. Candidates for licensure in Ohio must disclose information related to any misdemeanor committed in the course of practice, prior felony, crime involving gross immorality or moral turpitude, violation of a drug law and/or recent diagnosis or treatment of a psychotic disorder. The Ohio Board of Nursing will determine whether the candidate may take the licensing exam.

### Graduation Requirements

To qualify for an associate degree, Registered Nursing students must pass all the required courses, have a cumulative average of 2.0 and have a C as a minimum grade in each anatomy and physiology course and in all nursing (NUR) courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

### Transfer Options

Students enrolled in the Associate of Applied Science degree in Nursing are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree in nursing. A number of colleges and universities have designed baccalaureate nursing completion programs for students who have completed their associate degree in nursing and are licensed registered nurses. Local programs include:

- Wright State University
- Urbana University

See the transfer section of the catalog and your academic advisor for more information.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ENG 111	English I	4
ITS 103	Information Technology Basics	3
<b>Winter</b>		
ENG 112	English II	4
PSY 111	Psychology I	3
<b>Spring</b>		
ENG 223	Technical Report Writing	3
PSY 223	Lifespan Human Growth and Development*	5
<b>Summer</b>		
MST 105	Medical Terminology	3
BIO 131	Microbiology*	4
<b>Fall</b>		
BIO 121	Anatomy and Physiology I*	4
SOC 110	Sociology	3
<b>Winter</b>		
BIO 122	Anatomy and Physiology II*	4
COM 111	Interpersonal Communications	3
<b>Spring</b>		
BIO 123	Anatomy and Physiology III*	4
--	Humanities/Social Science Elective	3

<b>Summer</b>		
NUR 114	Dosage Calculations	1
<b>Fall</b>		
NUR 110	Nursing Academic Success Seminar	1
NUR 170	Nursing I	6
<b>Winter</b>		
NUR 171	Nursing II	6
NUR 200	Service Learning Project **	1
<b>Spring</b>		
NUR 120	Pharmacology	3
NUR 172	Nursing III	8
<b>Summer</b>		
NUR 274	Nursing IV	5
NUR 275	Nursing V	5
<b>Fall</b>		
NUR 276	Nursing VI	11
<b>Winter</b>		
NUR 267	Nursing VII	4
NUR 265	Nursing VIII	5
NUR 266	Directed Nursing Practice	2
NUR 281	Nursing Comprehensive Review Seminar	2
	<b>Total Credit Hours</b>	<b>110</b>

\*BIO 121, BIO 122, BIO 123, BIO 131 and PSY 223 must be successfully completed within ten years of entry into the first clinical nursing course. If older than ten years, the course must be repeated. A grade of C or better is required for successful completion of BIO 121, BIO 122 and BIO 123.

\*\*NUR 200 may be taken after completing NUR 170 and must be completed prior to enrolling in the final quarter of nursing courses.

# Office Administration

## OFFICE ADMINISTRATION

All students in Office Administration (OAD) take the same courses the first year. Beginning the second year, students elect to specialize in Professional Office Administration or Medical Office Administration, and the OAD prefix is maintained in both specializations throughout the second year.

The program schedules that follow are designed for full-time students who have completed all prerequisites and who have met any college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Office Administration, a graduate will be able to:

- compose and produce quality business documents using technology.
- perform office administrative functions using critical thinking, management, prioritizing, and organizational skills.
- transcribe medical documents from dictation (pertinent to Medical Office Administration only).
- demonstrate good oral communication skills.
- demonstrate good human relations skills, including customer service, teamwork, and ethics.

### Scholastic Preparation

Students must possess the ability to key the alphabetic and numeric keys “by touch” using appropriate techniques to enroll in OAD 101, Document Production I. Students enrolling in the course should be keyboarding at a minimum of 20 wpm. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing. Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives is on page 8.

## PROFESSIONAL OFFICE ADMINISTRATION MAJOR

Professional office administrators function in a continually shifting role in a variety of office settings because of the availability of technology, the emphasis on greater efficiency and productivity, and an increasing managerial role. With this shift generally comes greater responsibility that is reflected in the duties of the professional office administrator, which include management functions, such as project management; integrated computer software applications; organization and scheduling; internet/intranet communications and research; document preparation, storage, and retrieval; and customer service and public relations.

Today’s professional office administrators often purchase office equipment and supplies; plan meetings and special events; work closely with vendors and suppliers; create and give presentations; interview, orient, and supervise other staff; write and edit documents; coordinate direct mailings; maintain multiple schedules and calendars; handle messages and correspondence; and maintain computer files, directories, and databases. By performing their responsibilities well, professional office administrators have opportunities for promotion to management positions.

Course #	Course Title	Credit Hours
<b>Fall</b>		
OAD 101	Document Production I	5
OAD 105	Business English	4
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3
MGT 105	Contemporary American Business	3
<b>Winter</b>		
OAD 102	Document Production II	5
OAD 130	Advanced Grammar and Proofreading	4
COM 121	Public Speaking	3
ENG 111	English I	4
ITS 12P	Beginning Presentation Graphics	1
ITS 12S	Beginning Spreadsheet	1
<b>Spring</b>		
OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II	4
ENG 221	Business Communication	3
ITS 12D	Beginning Database	1
<b>Fall</b>		
ACC 111	Principles of Accounting I	4
ITS 14S	Intermediate Spreadsheet	2
MGT 106	Organizational Behavior	4
MGT 112	Principles of Management	4
SPN 100	Conversational Spanish I	3

**Winter**

OAD 260	Office Simulation	5
EBE 100	Employability Skills	2
ENG 135	Business Report Writing	4
ITS 230	Introduction to Web Design	3
HRM 225	Human Resource Management	3

**Spring**

OAD 285	Co-op Education	2
COM 111	Interpersonal Communication	3
ITS 14D	Intermediate Database	2
MGT 250	Leadership in Organizations or	
MGT 265	Negotiation Skills	4/3
--	Social Science Elective	3

Total Credit Hours 98/99

**MEDICAL OFFICE ADMINISTRATION MAJOR**

Medical office administrators function in a wide variety of medical settings, including physicians' offices, hospitals, nursing homes, etc. They may transcribe dictation, prepare medical records or charts, schedule appointments, handle correspondence, prepare bills and process insurance forms. In addition to excellent keyboarding skills, medical office administrators must possess expertise in medical terminology, familiarization with medical references, knowledge of medical coding and familiarization with HIPAA regulations. In today's global society basic foreign language skills are increasingly important to facilitate communication in a medical environment. Strong human relations skills are also important as medical office administrators interact with people in stressful situations. Demonstrating mastery of these skills should give medical office administrators opportunities for promotion to medical office management positions.

**Scholastic Preparation**

Students must possess the ability to key the alphabetic and numeric keys "by touch" using appropriate techniques to enroll in OAD 101, Document Production I. Students coming into the course should be keyboarding at a minimum of 20 nwpm. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses.

**Humanities/Social Science Electives**

A complete listing of humanities and social science electives is on page 8.

Course #	Course Title	Credit Hours
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**Fall**

OAD 101	Document Production I	5
OAD 105	Business English	4
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3
104 MGT 105	Contemporary American Business	3

**Winter**

OAD 102	Document Production II	5
OAD 130	Advanced Grammar and Proofreading	4
COM 121	Public Speaking	3
ENG 111	English I	4
ITS 12P	Beginning Presentation Graphics	1
ITS 12S	Beginning Spreadsheet	1

**Spring**

OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II or	
ENG 135	Business Report Writing*	4
ENG 221	Business Communication	3
ITS 12D	Beginning Database	1

**Fall**

OAD 248	Basic Medical Machine Transcription	4
OAD 272	ICD - 9-CM Coding	5
BIO 105	Fundamentals of Anatomy and Physiology	4
MST 105	Medical Terminology	3
SPN 100	Conversational Spanish I	3

**Winter**

OAD 249	Advanced Medical Machine Transcription	4
OAD 256	Medical Office Management	4
OAD 270	CPT - Coding	5
EBE 100	Employability Skills	2
SPN 102	Conversational Spanish II	3

**Spring**

OAD 285	Co-op Education	2
COM 111	Interpersonal Communication	3
--	HRM, MGT or OAD Elective**	3
--	Social Science Elective	3

Total Credit Hours 99

\*ENG 135, Business Report Writing, will not necessarily transfer as the equivalent of ENG 112, English II.

\*\*Students are required to take three credit hours of HRM, MGT, or OAD courses not already prescribed.

**OFFICE ADMINISTRATION CERTIFICATE**

A one-year certificate in Office Administration is available for students who need a quicker entry into the job market. This will provide the student with the skills needed for entry-level positions in today's computer-oriented and fast-paced business office. Students can fully apply this one-year certificate toward the completion of either the Professional Office Administration or the Medical Office Administration associate degree program. This certificate can be earned through a combination of evening and online courses.



Course #	Course Title	Credit Hours
<b>Fall</b>		
OAD 101	Document Production I	5
OAD 105	Business English	4
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3
MGT 105	Contemporary American Business	3
<b>Winter</b>		
OAD 102	Document Production II	5
OAD 130	Advanced Grammar and Proofreading	4
COM 121	Public Speaking	3
ENG 111	English I	4
ITS 12P	Beginning Presentation Graphics	1
ITS 12S	Beginning Spreadsheet	1
<b>Spring</b>		
OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II	
	or	
ENG 135	Business Report Writing	4
ENG 221	Business Communication	3
ITS 12D	Beginning Database	1
	Total Credit Hours	51

## OFFICE ADMINISTRATION DEPARTMENTAL CERTIFICATES

Three departmental certificates are available for students who want to upgrade skills in a particular area. These certificates can be applied for by filling out the certificate application form in the Business and Applied Technologies Division office in the Brinkman Educational Center.

### COMMUNICATION CERTIFICATE

This certificate will provide the student with extensive background in and knowledge of effective communication skills necessary in today's work environment, including writing, oral, and listening skills. The ability to communicate effectively is listed among the top five qualifications that employers require and is often ranked as the number one required skill. In today's information-based world, excellent communication skills are vital to success, and this certificate will provide students the opportunity to gain invaluable knowledge of and practice using effective communication skills and/or to improve the communication skills they already possess.

Course #	Course Title	Credit Hours
OAD 105	Business English	4
OAD 130	Advanced Grammar and Proofreading	4
COM 111	Interpersonal Communication	3
COM 121	Public Speaking	3
ENG 111	English I	4

ENG 135	Business Report Writing	4
ENG 221	Business Communication	3
	Total Credit Hours	25

### ADVANCED MEDICAL CODING CERTIFICATE

This certificate will provide the students with experience using ICD-9-CM and CPT coding resources available in print, online, etc. It will also give the student background, current, and related information necessary for success as a medical coder. Upon completion of this certificate, the student will have the option to attend nationally sponsored review sessions and then sit for the national medical coding certification exam administered by a number of medical coding associations. A fee is charged for participation in the review sessions and/or for taking the exam. The total cost to the participant will vary depending upon the association administering the review sessions and the exam, the testing site location, and the number of review sessions chosen, if any, as review sessions are optional.

Course #	Course Title	Credit Hours
<b>Summer</b>		
BIO 105	Fundamentals of Anatomy and Physiology	4
MST 105	Medical Terminology	3

### Fall

LPN 125	Introduction to Disease Processes	4
OAD 272	ICD-9-CM Coding	5

### Winter

OAD 270	CPT Coding	5
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### Spring

OAD 275	Medical Coding Trends and Issues	4
OAD 276	Advanced Medical Coding	5

	Total Credit Hours	30
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### MEDICAL TRANSCRIPTION CERTIFICATE

This certificate will provide the student with the word processing skills, medical terminology, anatomy background, and transcription skills necessary to transcribe medical documents accurately and effectively using appropriate punctuation, terminology, spelling, and formatting. Students will gain experience transcribing dictation of varying difficulty and length spoken by physicians from diverse ethnic backgrounds. This certificate will be beneficial to those students pursuing a career in medical transcription who are currently working in a medical environment or who desire to work in such an environment. The skills acquired will allow students the opportunity to apply for entry-level transcriptionist positions in variety of medical settings.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
OAD 101	Document Production I	5
OAD 248	Basic Medical Machine Transcription*	4
OAD 249	Advanced Medical Machine Transcription	4
BIO 105	Fundamentals of Anatomy and Physiology	4
MST 105	Medical Terminology	3
	<b>Total Credit Hours</b>	<b>20</b>

\*A student can take OAD 248 concurrently with OAD 101 if he or she can type at least 35 wpm and knows Microsoft Word to a level equivalent to ITS 12K or ITS 12W. Please see the Dean of Business and Applied Technologies for a waiver. A Medical Transcription Certificate student with strong grammar skills can also ask the dean to waive OAD 105 and OAD 130 as a prerequisite for OAD 248.

# Paralegal

\*See your academic advisor for other possible humanities or career-related electives.

## PARALEGAL TECHNOLOGY

The Paralegal Technology program trains persons to assist attorneys in the delivery of legal services. Paralegals are employed by private law firms, financial institutions, courts, prosecutors' offices, legal aid societies, public defenders' programs and corporate law offices.

Clark State cooperates with Sinclair Community College to offer approximately one year of courses leading toward an associate degree with a major in paralegal. Students are cautioned that it will take more than a year to complete the remainder of the courses at Sinclair. By taking a year of coursework at Clark State, many students are able to minimize commuting time.

Students enrolled in the Clark State program are asked to contact the Dean of Business and Applied Technologies.

Course #	Course Title	Credit Hours
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ACC 111	Principles of Accounting I	4
ACC 112	Principles of Accounting II	4
COM 111	Interpersonal Communications	3
ECO 221	Principles of Macroeconomics	3
ENG 111	English I	4
ENG 112	English II	4
ITS 12P	Beginning Presentation Graphics	1
ITS 12S	Beginning Spreadsheet	1
ITS 12W	Beginning Word Processing	1
MTH 106	Business Mathematics or	
MTH 121	College Algebra I	3
OAD 105	Business English	4
OAD 130	Advanced Grammar and Proofreading	4
PLS 110	American National Government	3
PSY 111	Psychology I or	
SOC 110	Sociology	3

One of the following humanities electives:\*

ART 130	Appreciation of the Arts	3
ENG 250	American Literature	3
HST 121	American History to 1810	3
MUS 130	Music Appreciation	3
PHL 210	Ethics	3
THE 130	Introduction to Theater	3

One of the following career-related electives:\*

ACC 113	Principles of Accounting III	4
ACC 221	Tax Accounting I	4
ACC 205	Spreadsheet Accounting	4
MST 105	Medical Terminology	3
ECO 222	Principles of Microeconomics	3
PLS 220	Constitutional Law	3
RES 240	Real Estate Appraisal	2
RES 245	Real Estate Finance	2

Total Credit Hours	49
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# Photography

## PHOTOGRAPHY CERTIFICATE

Scientific, industrial and societal needs point to a growing demand for trained photographers. Photography is also a vital element in both entertainment and communications. Photography also may be a personal venture, pleasing for its artistic value alone.

The program schedule is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking developmental courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of the Photography Certificate, a graduate will be able to:

- take black and white photographs, which depict depth of field.
- develop a black and white photograph and print that photo.
- develop a color photograph and color balance it to industry standards.
- pose a subject and take a portrait photograph to industry standards.
- take a digital photograph using proper lighting as defined by industry standards.
- take a digital photograph and through computer software manipulate that photograph and print it.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
PHO 111	Photography I	3
MGT 105	Introduction to Business	3
ENG 111	English I	4
- -	Humanities/Social Science Elective	3
PHO 130	Digital Photography I	3
<b>Winter</b>		
PHO 112	Photography II	3
ART 130	Appreciation of the Arts	3
COM 111	Interpersonal Communication	3
PHO 131	Digital Photography II	3
<b>Spring</b>		
PHO 121	Color Photography I	3
ART 135	Art History III	3
ENG 112	English II	4
PSY 111	Psychology I	3
PHO 132	Digital Photography III	3
<b>Summer</b>		
PHO 122	Color Photography II	4
PHO 124	Photography Portfolio	4
PHO 180	Photography Practicum	3
<b>Total Credit Hours</b>		<b>52</b>

# Physical Therapy

## PHYSICAL THERAPIST ASSISTANT

The Physical Therapist Assistant program is a seven-quarter curriculum, which combines didactic and clinical learning experiences that are within the legal scope of responsibility of physical therapist assistants.

The physical therapist assistant delivers services under the supervision of a physical therapist that completes an initial examination of the patient and determines the appropriate treatment plan and goals for the patient. The physical therapist assistant shares the responsibility for administering treatments, instructing patients in exercises and activities of daily living and documenting the patient's response to therapy. Graduates will be prepared to function in their role to provide treatment in a variety of settings such as inpatient, outpatient and home care services.

Upon successful completion of all aspects of the PTA program, graduates are eligible to take the state licensing examination. Licensure is mandatory for practice as a physical therapist assistant in the State of Ohio. The OTPTAT Board requires FBI and Ohio BCI criminal records checks as part of the Ohio licensing application process. Visit the Board website at <http://otptat.oh.gov> for more information.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students working full time are strongly encouraged to complete all or most non-core PTA courses prior to starting the program. (See the PTA Petitioning Handbook for details.) Students should consult their academic advisors for help in planning their schedules.

### Course Format

Each PTA course is composed of two required components—an online lecture component and a lab component, which may be taught at the Leffel Lane campus or other College approved site.

### Scholastic Preparation

#### Admission Requirements

The number of students that can be admitted to the program each year is restricted due to the limited availability of clinical sites. All applicants are considered for admission by the date in which they file a petition in the Health and Human Services Office.

In addition to completing the standard procedures for admission to the College, students must complete the following to be eligible to petition to the Physical Therapist Assistant Program:

- a minimum COMPASS reading score of 75. If the student does not obtain a 75, he/she is required to take and pass with a grade of C or better the appropriate college preparatory course (CPE 061 and/or CPE 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last three years and received reading scores of greater than or equal to 20 on the ACT and 500 on the verbal portion of the SAT or have obtained a C or better in a college-level English course.
- a minimum COMPASS score of 38 on pre-algebra and 29 on the algebra test. If the student does not obtain the required scores, he/she must take and pass with a grade of C or better the appropriate college preparatory course(s) (CPE 091/DEV 091 and/or CPE 101/DEV 101). Students are excused from taking the pre-algebra and algebra placement test if they have taken and received a C or better in a college-level math or physics course within the past ten years. Students are excused from taking the pre-algebra and algebra placement test if they have taken the ACT or SAT exam within the last three years and received math scores of greater than or equal to 22 on the ACT and 560 on the math portion of the SAT. Students are excused from taking the Algebra placement test if they opt for and pass the PTA Physics Proficiency.
- a grade of C or better in either high school physics (within past 5 years) or a college physics course (PHY 110, Fundamentals of Physics or its equivalent, within the past ten years) or passing of the PTA Physics Proficiency (within the past year).
- a grade of C or better in either high school chemistry (within the past five years) or a college chemistry course (CHM 114 or CHM 115 or the equivalent, within the past 10 years) or completion of BIO 121, Anatomy and Physiology I (or the equivalent) with a C or better.
- GPA of 2.5 in the required curricular courses; the GPA includes chemistry and physics ONLY when no other courses in the PTA curriculum have been taken. Students who have completed BIO 121 and BIO 122 or the equivalent when they petition can be admitted with a GPA of 2.0.

In order to be accepted into the physical therapist assistant courses, students must maintain the required cumulative grade point average in the required courses in the curriculum while on the admission or waiting list. College preparatory courses and other courses, which are not listed as part of the curriculum, are not included in calculating the GPA. However, a minimum grade of C is required in the pre-requisite and college preparatory courses (CPE). Please refer to the PTA Petitioning Handbook for additional information on courses in which a C is required. If the student does not maintain the required GPA while on the admission or waiting list, his

or her name will be removed from the list. While students are on either list they may take any of the non-core PTA courses in the curriculum. (Muscle Anatomy, BIO 118 and Biomechanics, BIO 230 are considered core PTA courses).

- Prior to entering the first physical therapist assistant course (Introduction to Patient Management, PTA 120) students must complete 30 hours of volunteer/ observation or work experience under the supervision of a physical therapist or physical therapist assistant within the past five years. These hours must be completed in two different settings. Failure to do so by the date established in the PTA Petitioning Handbook will result in removal from the admission list.

Entry into physical therapy assistant courses occurs once a year in the fall. Acceptance letters for fall entry are mailed out in April of each year. Applicants are placed on either the admission or waiting list, depending upon program openings. This information is outlined in complete detail in the PTA Petitioning Handbook, available in the Admissions Office, Health and Human Services Division office and online.

### Learning Outcomes

Upon completion of the PTA program, a graduate will be able to:

- demonstrate proficient entry-level knowledge and skill in implementing treatment practices appropriate to the plan of care established by the physical therapist.
- demonstrate proficient entry-level knowledge and skill in utilizing testing and measurement techniques appropriate to the plan of care established by the physical therapist.
- communicate effectively with patients, families, colleagues and other health care providers.
- demonstrate behavior that reflects respect for and sensitivity to individual differences when working with patients, families, colleagues and other health care professionals.
- adhere to ethical and legal standards throughout the provision of physical therapy services.
- provide patient care in a safe manner that minimizes risk to patient, self, and others.
- practice physical therapy in an effective manner making judgments consistent with the physical therapist plan of care and the role of the physical therapist assistant.
- practice lifelong learning that reflects social responsibility and career development.

### Graduation Requirements

A 2.0 cumulative average on a 4.0 scale is the standard used for the major courses in the PTA curriculum.

### Clinical Requirements

Prior to the second year, a physical exam, a two-step Mantoux test, Hepatitis B immunization or waiver, a health history including record of childhood immunizations or adult titers, professional CPR and First Aid training are required. A criminal records check must be completed within the three

months immediately prior to entry into clinical courses in the second year. At a minimum, a civilian (BCI) background check is required. A federal (FBI) background check may be required. Additional medical tests and other requirements may be necessary depending upon clinical site placement.

### Liability Insurance

Students will be billed for liability insurance for the academic year of directed practice courses.

### Certification Fees

Students will be billed for certification fees during the second year of the program to cover a portion of the licensure examination.

### Accreditation

The Clark State PTA program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on 5.

### Transfer Options

Students enrolled in the Physical Therapist Assistant, Associate of Applied Science degree are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of college or universities have designed baccalaureate completion programs for students completing applied degrees. Local programs include:

- Franklin University's Bachelor of Science in Healthcare Management
- Urbana University's Bachelor of Science in Healthcare Management

See the transfer section of the catalog for more information.

Course #	Course Title	Credit Hours
<b>Fall</b>		
PTA 110	PTA Survey	3
PTA 120	Introduction to Patient Management	2
MST 105	Medical Terminology	3
BIO 118	Muscle Anatomy	2
BIO 121	Anatomy and Physiology I	4
ENG 111	English I	4
ITS 103	Information Technology Basics	3
<b>Winter</b>		
PTA 145	PTA Procedures I	4
BIO 122	Anatomy and Physiology II	4
BIO 230	Biomechanics	4
ENG 112	English II	4
PSY 111	Psychology I	3

**Spring**

PTA 146	PTA Procedures II	5
PTA 160	PTA Rehabilitation I	6
BIO 123	Anatomy and Physiology III	4
PSY 223	Lifespan Human Growth and Development	5

**Summer**

PTA 241	PTA Procedures III	5
PTA 245	PTA First Year Capstone	1
--	Humanities/Social Science Elective	3

**Fall**

PTA 260	PTA Rehabilitation II	6
PTA 281	Directed Practice I	3
PTA 291	Seminar I	2
COM 111	Interpersonal Communication	3
--	Humanities/Social Science Elective	3

**Winter**

PTA 265	PTA Rehabilitation III	6
PTA 270	PTA Trends and Issues	2
PTA 282	Directed Practice II	3
PTA 292	Seminar II	2
ENG 223	Technical Report Writing	3

**Spring**

PTA 283	Directed Practice III	6
PTA 293	Seminar III	2
	Total Credit Hours	110

# Psychology - Wright State University

## PSYCHOLOGY TRANSFER

The Psychology Transfer program provides curricular options to prepare a student to transfer into the Bachelor of Arts or the Bachelor of Science degree in Psychology at Wright State University. It serves as a general guideline for transfer. The best selection of courses for a given student will vary depending upon the area of Psychology in which the student is interested and on the area selected for a minor at Wright State University.

The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory education recommendations. Some individuals, especially part-time students and those taking college preparatory education courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

Wright State University offers both Bachelor of Arts and Bachelor of Science degrees in Psychology. There is considerable flexibility within either of these degrees for students to pursue either a minor or a specialized area of study, including a Bachelor of Science in Psychology with a Concentration in Behavioral Neuroscience. Students interested in pursuing the Pre-Psychology degree at Clark State are encouraged to contact the Psychology Undergraduate Program Office at Wright State by calling 937.775.4155 to arrange a pre-admission advising appointment.

### Learning Outcomes

Upon completion of an Associate degree in pre-Psychology, a graduate will be able to meet the goals outlined for the general Associate of Arts or Associate of Science degree; additionally, the student will:

- demonstrate proficiency in a foreign language.
- assess divergent aspects of individual and group human behavior in a wide variety of contexts.

### Scholastic Preparation

Students entering this program should have taken the college preparatory courses offered by their high schools. Students who do not test into STT 264, Statistics I, will need to take the necessary prerequisite mathematics courses before beginning the Statistics/Math sequence. Ideally, students should also have taken a foreign language in high school. Those students who have not taken a foreign language in high school should include a full year of college level foreign language among their electives.

## BACHELOR OF ARTS

Course #	Course Title	Credit Hours
<b>Fall</b>		
ENG 111	English I	4
PSY 111	Psychology I	3
HST 111	Western Civilization to the 14th Century	3
ART 130	Appreciation of the Arts	3
ITS 12A	Windows Concepts	2
ITS 12W	Beginning Word Processing	1
<b>Winter</b>		
ENG 112	English II	4
PSY 112	Psychology II	3
STT 264	Statistics I	4
HST 112	Western Civilization 14th Through 18th Centuries	3
ITS 12D	Beginning Database	1
ITS 12P	Beginning Presentations	1
ITS 12S	Beginning Spreadsheet	1
<b>Spring</b>		
SOC 110	Sociology	3
HST 113	Western Civilization 19th Century To the Present	3
ECO 110	General Economics	3
RST **	Regional Studies	3
--	Literature Arts Elective	3
<b>Fall</b>		
--	Literature Arts Elective	3
BIO 141	Evolution, Diversity and Ecology* or Physical Geology*	5
GLG 131	Lifespan Human Growth & Development	5
PSY 223	Great Books: World Literature	3
ENG 230		
<b>Winter</b>		
STT 265	Statistics II	4
PSY 230	Abnormal Psychology	3
COM 121	Public Speaking	3
BIO 142	The Human Organism or Historical Geology	5
GLG 132		
<b>Spring</b>		
HUM 299	Capstone	3
BIO 143	Cell Biology/Genetics or Environmental Geology	5
GLG 133	American National Government	5
PLS 110		3
Total Credit Hours		93



\*Students should take either all three BIO courses or all three GLG courses.

\*\*Choose from Regional Studies: 260: Asia-China,  
Regional Studies: 262: North India,  
Regional Studies: 270: Africa, or  
Regional Studies: 280: Latin America

BIO 143	Cell Biology/Genetics	5
	or	
BIO 153	Cellular Biology and Genetics	5
PLS 110	American National Government	3
<b>Total Credit Hours</b>		<b>93</b>

## BACHELOR OF SCIENCE

Course #	Course Title	Credit Hours
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### Fall

ENG 111	English I	4
PSY 111	Psychology I	3
HST 111	Western Civilization to the 14th Century	3
ART 130	Appreciation of the Arts	3
ITS 12A	Windows Concepts	2
ITS 12W	Beginning Word Processing	1

### Winter

ENG 112	English I	4
PSY 112	Psychology II	3
STT 264	Statistics I	4
HST 112	Western Civilization 14th Through 18th Centuries	3
ITS 12D	Beginning Database	1
ITS 12P	Beginning Presentations	1
ITS 12S	Beginning Spreadsheet	1

### Spring

SOC 110	Sociology	3
HST 113	Western Civilization 19th Century To the Present	3
ECO 110	General Economics	3
RST **	Regional Studies	3
--	Literature Arts Elective	3

### Fall

MTH 121	College Algebra I	3
BIO 141	Evolution, Diversity and Ecology*	5
	or	
BIO 151	Evolution and Ecology*	5
PSY 223	Lifespan Human Growth & Development	5
ENG 230	Great Books: World Literature	3

### Winter

STT 265	Statistics II	4
PSY 230	Abnormal Psychology	3
COM 121	Public Speaking	3
BIO 142	The Human Organism	5
	or	
BIO 152	Human & Animal Anatomy	5

### Spring

HUM 299	Capstone	3
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\*The Psychology Department at WSU strongly encourages BIO for the Science sequence for Psychology majors.(BIO 141, 142, 143). Those interested in the Behavioral neuroscience option should take the Biology sequence designed for Biology majors. (BIO 151, 152, 153).

# Realtime Reporting

## JUDICIAL REPORTING (COURT REPORTING)

Judicial reporters record the verbatim proceedings of a courtroom, deposition, hearing, arbitration, or meeting and provide an accurate transcript of the proceedings.

ClarkState students learn to write realtime using a computerized machine and to prepare transcripts using computer-aided transcription (CAT) software. Students' writing skills are perfected by utilizing a mock computer-integrated courtroom (CIC). All Realtime Reporting students are required to purchase a computerized writer and a laptop computer.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

Students will follow the curriculum of the Realtime Reporting program through the first year before deciding whether they will select Judicial Reporting or Broadcast Captioning/CART as their career goal. All Realtime Reporting students may also elect to follow both tracks, graduating with a degree in both options.

### Learning Outcomes

Upon completion of an Associate of Applied Business degree in Judicial Reporting, a graduate will be able to:

- write a realtime translation theory.
- read aloud from shorthand notes quickly and accurately.
- demonstrate knowledge of basic hardware care, maintenance, and setup of a realtime system.
- demonstrate an understanding and application of law and legal terminology, anatomy and/or medical terminology and current events.
- assume the role of the realtime reporter.
- apply the NCRA Code of Professional Ethics.
- determine and use the appropriate reference sources in transcript production.
- write and transcribe testimony at 225 wpm with at least 95 percent accuracy.
- write and transcribe jury charge at 200 wpm with at least 95 percent accuracy.
- write and transcribe literary at 180 wpm with at least 95 percent accuracy.
- perform 80 hours of verified internship and summarize the experience in a written narrative.
- prepare a 40-page sellable transcript.

### Scholastic Preparation

Prospective students should be disciplined, self-motivated, computer-literate, and possess above-average language skills.

They also need to be able to meet deadlines, work well under pressure, and concentrate for long periods of time.

Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

Entering students must be high school graduates or possess a certificate of general education (GED).

### Graduation Requirements

The Judicial Reporting program is approved by the National Court Reporters Association. This association's requirements are met or exceeded with the following standards:

- The student shall pass three five-minute tests with 95 percent accuracy at each of the following speeds: 225 wpm testimony (two-voice), 200 wpm jury charge and 180 wpm literary.
- The student shall complete at least 80 verified hours of internship under the supervision of a practicing judicial reporter.
- The student shall prepare a five-page, first-pass transcript with 95 percent accuracy.
- Student must have passed each of the terminal speed courses (RTR 203, RJR 213, and RJR 233) within 12 months prior to graduation.

Clark State Community College reserves the right to change these standards when determined educationally expedient.

### Transfer Options

Students enrolled in Associate of Applied Business and Associate of Applied Science degree programs are preparing for employment upon graduation from the program. However, at some point many of these students are also interested in completing a baccalaureate degree. A number of colleges or universities have designed baccalaureate completion programs designed for students completing applied degrees. See the Transfer section of the catalog for more information.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
RTR 105	Realtime Theory	7
RTR 110	Survey of Realtime Reporting	1
RTR 125	Vocabulary and Reference Use	2
ITS 103	Information Technology Basics	3
OAD 105	Business English	4

<b>Winter</b>		
RTR 106	Realtime Theory Reinforcement	2
RTR 107	Beginning Speed Building I	3
RTR 131	Beginning Computer Assisted Transcription	3
RTR 152	Realtime Transcription	2
ENG 111	English I	4
ENG 221	Business Communication	3
<b>Spring</b>		
RTR 108	Beginning Speed Building II	3
RTR 111	Beginning Testimony I	3
RTR 120	Law and Legal Terminology	2
RTR 152	Realtime Transcription	2
ENG 112	English II	4
<b>Summer</b>		
RTR 112	Beginning Testimony II	3
RTR 151	Realtime Transcription	1
MST 105	Medical Terminology	3
--	Humanities Elective	3
--	Social Science Elective	3
--	Humanities/Social Science Elective (GA)	3
<b>Fall</b>		
RJR 211	Advanced Testimony I	3
RJR 231	Jury Charge I	3
RTR 101	Advance Speed Building I	3
RTR 153	Realtime Transcription	3
--	Humanities/Social Science Elective	3
<b>Winter</b>		
RJR 212	Advanced Testimony II	3
RJR 232	Jury Charge II	3
RJR 245	Office Management	3
RTR 132	Advanced Computer Assisted Transcription	3
RTR 153	Realtime Transcription	3
RTR 202	Advanced Speed Building II	3
<b>Spring</b>		
RJR 213	Advanced Testimony III*	3
RJR 233	Jury Charge III*	3
RTR 153	Realtime Transcription	3
RTR 203	Advanced Speed Building III*	3
RJR 280	Judicial Reporting: The Professional Experience	1
	<b>Total Credit Hours</b>	<b>110</b>

\*Must be completed within 12 months prior to graduation.

## BROADCAST CAPTIONING/CART OPTION

Broadcast captioners capture the spoken word on live television programs instantly, and their work product is visible nationally as the caption scrolls across the television screen. The realtime reporter who provides this service

may be working in the office of a captioning company or from a broadcast studio that is set up in his/her home. This very demanding profession mandates that the Clark State Realtime Reporting student be trained to write realtime on a computerized writer that is cabled to a laptop computer. This allows the student to practice accurate writing techniques from the beginning of his/her college career, resulting in the speed and accuracy required for this specialty. Students' writing skills are perfected by utilizing a mock broadcast captioning studio. All Realtime Reporting students are required to purchase a computerized writer and a laptop computer.

CART (Communication Access Realtime Translation) reporters provide instantaneous text of the spoken word displayed on a computer screen or large projection screen. CART is classified as an assistive technology and is considered a reasonable accommodation under the Americans with Disabilities Act. It is a service provided in the academic setting for students with hearing impairment as well as in public settings such as conventions, churches, corporate meetings, funerals, police interrogations, etc. This specialty also requires realtime writing as described above as well as training in deaf culture so that the student understands and is sensitive to the needs of the consumer.

Students will follow the curriculum of the Realtime Reporting program through the first year before deciding whether they will select Broadcast Captioning/CART or Judicial Reporting as their career goal. All Realtime Reporting students may also elect to follow both tracks, graduating with a degree in both options.

## Learning Outcomes

Upon completion of an Associate of Applied Business degree majoring in Realtime Reporting with an option in Broadcast Captioning/CART, a graduate will be able to:

- write a realtime translation theory.
- transcribe three five-minute, 180 wpm literary takes with 1.4 syllabic density at 96 percent accuracy.
- demonstrate knowledge of and the ability to perform the basic setup and maintenance of captioning equipment.
- prepare captioned translation of one hour of captioning services.
- perform 40 verified hours actual writing within a captioning environment and summarize the experience in a written narrative.
- paraphrase and accurately finger spell in realtime using the phonetic translator.
- build and maintain realtime dictionaries.
- demonstrate knowledge of the CART Provider's Manual and the Guidelines for Professional Practice.
- demonstrate ability to connect a computer laptop to current technology and set up equipment for maximum benefit of CART recipients.
- demonstrate knowledge of the role of sign language interpreters and oral interpreters.

- prepare a realtime translation of one hour of CART services.
- perform 40 verified hours of actual writing within a CART environment and summarize the experience in a written narrative.

### Scholastic Preparation

Prospective students should be dependable, flexible, innovative, organized, professional, punctual, trustworthy, disciplined, and able to work under pressure. They should possess above-average language skills.

Students with little or no computer background should enroll in ITS 080, Computer Fundamentals, as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 12K, Keyboarding/Word Processing.

Entering students must be high school graduates or possess a certificate of general education (GED).

### Graduation Requirements

The Broadcast Captioning/CART Option program is approved by the National Court Reporters Association. This association's requirements are met or exceeded with the following standards:

- Prepare an acceptable realtime translation of one hour of CART services.
- Prepare an acceptable captioned translation of one hour of captioning services.
- Complete 40 hours of actual writing time in the CART environment.
- Complete 40 hours of actual writing time in the captioning environment.
- Pass three five-minute tests with 96 percent accuracy at 180 wpm literary.
- Produce a five-page, first-pass transcript with at least 96 percent accuracy.
- Student must have passed the terminal speed course RTR 203 within 12 months prior to graduation.

Clark State Community College reserves the right to change these standards when determined educationally appropriate.

### Humanities/Social Science Electives

A complete listing of political science electives can be found on page 8.

Course #	Course Title	Credit Hours
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#### Fall

RTR 105	Realtime Theory	7
RTR 110	Survey of Realtime Reporting	1
RTR 125	Vocabulary and Reference Use	2
ITS 103	Information Technology Basics	3
OAD 105	Business English	4

#### Winter

RTR 106	Realtime Theory Reinforcement	2
RTR 107	Beginning Speed Building I	3
RTR 131	Beginning Computer Assisted Transcription	3
RTR 152	Realtime Transcription	2
ENG 111	English I	4
ENG 221	Business Communication	3

#### Spring

RTR 108	Beginning Speed Building II	3
RTR 111	Beginning Testimony I	3
RTR 120	Law and Legal Terminology	2
RTR 152	Realtime Transcription	2
ENG 112	English II	4

#### Summer

RTR 112	Beginning Testimony II	3
RTR 151	Realtime Transcription	1
MST 105	Medical Terminology	3
GLG 129	Survey of Earth Science	4
PLS -	Political Science Elective	3
SOC 110	Sociology	3

#### Fall

RCC 110	Introduction to Deaf Community	4
RCC 221	Captioning/CART I	2
RCC 231	Captioning/CART Speed Building I	1
RTR 151	Realtime Transcription	1
RTR 201	Advanced Speed Building I	3
ENG 250	American Literature	3

#### Winter

RCC 222	Captioning/CART II	3
RCC 232	Captioning/CART Speed Building II	1
RCC 245	Business Practices	2
RTR 132	Advanced Computer Assisted Transcription	3
RTR 151	Realtime Transcription	1
RTR 202	Advanced Speed Building II	3
CHM 110	Fundamentals of Chemistry	5

#### Spring

RCC 223	Captioning/Cart III	3
RCC 233	Captioning/CART Speed Building III	1
RCC 280	Captioning: The Professional Experience	.5
RCC 281	CART: The Professional Experience	.5
RTR 151	Realtime Transcription	1
RTR 203	Advanced Speed Building III*	3
GEO 220	World Regional Geography	3
HST 123	American History 1900 - Present	3

Total Credit Hours 110

\*Must have been completed within 12 months prior to graduation.

# REALTIME REPORTING DEPARTMENTAL CERTIFICATE

## JUDICIAL REPORTING SCOPIST CERTIFICATE

A one-year departmental certificate in Judicial Scoping is available for students wishing to use the skills acquired in the first year of the Judicial Realtime Reporting program to work in their career their while completing their degree in Realtime Reporting . All courses required for the completion of this certificate can be applied toward the completion of the Judicial Realtime Reporting associate degree program. Scopists are hired by reporters to edit and proofread transcripts while the reporters work in court or take depositions. This certificate can be applied for by filling out the certificates application form in the Business and Applied Technologies Division Office in the Brinkman Educational Center.

Course #	Course Title	Credit Hours
<b>Fall</b>		
RTR 105	Realtime Theory	7
RTR 110	Survey of Realtime Reporting	1
RTR 125	Vocabulary and Reference Use	2
ITS 103	Information Technology Basics	3
OAD 105	Business English	4
<b>Winter</b>		
RTR 106	Realtime Theory Reinforcement	2
RTR 107	Beginning Speed Building I	3
RTR 131	Beginning CAT	3
RTR 152	Realtime Transcription	2
ENG 111	English I	4
ENG 221	Business Communication	3
<b>Spring</b>		
RTR 108	Beginning Speed Building II	3
RTR 151	Realtime Transcription	1
RTR 120	Law and Legal Terminology	2
<b>Summer</b>		
BIO 102	Medical Terminology	3
RTR 112	Beginning Testimony II	3
RTR 150	Realtime Transcript	1
	Total Credit Hours	47

# Social Services

## SOCIAL SERVICES TECHNOLOGY

Social work education is at the core of the Social Services program. Social work is devoted to helping people function as well as they can within their environments. Areas of employment include alcohol and drug treatment, children's services, juvenile services, mental health, mental retardation and developmental disabilities and public assistance. The field placement portion of the curriculum provides over 480 hours of supervised learning experiences in local social services agencies.

The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an associate degree in Social Services, a graduate will be able to:

- develop skills in screening, assessing and developing treatment plans for client populations in the social services and/or addictions field.
- demonstrate the ability to integrate social work and/or addictions theory with practical applications.
- adhere to a professional code of ethics and policy/procedural standards in working with clients and coworkers.
- complete professional documentation reports, including progress notes, psycho/social histories and mental status evaluations, as well as other professional documentation.

### Registration

Graduates of this program who have achieved a grade of C or better in all Social Services courses are eligible to be registered as Social Work Assistants by the Ohio Counselor and Social Worker Board.

### Prerequisites

Persons seeking a career in social services should recognize that to be successful, they must be emotionally stable, creative and flexible. A social services professional must be able to work effectively with diverse groups of people and individuals with a wide variety of ages, racial and cultural backgrounds and life situations. ENG 111 and SWK 100 must be completed with a grade of C or better before enrolling in additional courses. Students will be expected to meet minimum behavioral expectancies in order to continue in the Social Services program.

### Health Requirements

Students must meet health requirements before taking the first practicum course.

### Graduation Requirements

Graduates must demonstrate professional ethical behavior, effective oral and written communication, professional documentation skills, basic listening skills and an awareness of personal biases as they affect clients.

### Liability Insurance

Students will be billed for liability insurance for the year of practicum courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

### Transfer Options

Students enrolled in the Social Services Technology Associate of Applied Science degree are preparing for employment upon graduation from the program. However, many of these students are also interested in completing a baccalaureate degree in Social Work. Some colleges and universities have designed baccalaureate completion programs for students who have completed their associate degree in social work. Local programs include:

- Capital University

See the transfer section of the catalog and your academic advisor for more information.

Course #	Course Title	Credit Hours
<b>Fall</b>		
SWK 100	Intro to Social Welfare and Social Work*	4
SWK 105	Chemical Dependency I	4
ENG 111	English I*	4
ITS 103	Information Technology Basics	3
PSY 111	Psychology I	3
<b>Winter</b>		
SWK 121	Social Work Methods and Procedures	5
ENG 112	English II	4
PSY 223	Lifespan Human Growth and Development	5
SOC 110	Sociology	3
<b>Spring</b>		
SWK 136	Affective Education	4
BIO 110	Fundamentals of Human Biology	4
ENG 223	Technical Report Writing	3
SOC 240	Racial and Cultural Minorities	3
--	Humanities Elective (GA)	3

<b>Fall</b>		
SWK 231	General Practice/Crisis Intervention	3
SWK 271	Social Service Practicum I**	2
SWK 291	Social Service Seminar I**	2
PSY 230	Abnormal Psychology	3
--	Technical Elective***	3
<b>Winter</b>		
SWK 238	Social Work and Group Work	3
SWK 236	Case Management	5
SWK 272	Social Services Practicum II	2
SWK 292	Social Services Seminar II	2
--	Humanities/Social Science Elective	3
<b>Spring</b>		
SWK 130	Social Policy and Service	4
SWK 232	Generalist Practice with Families	3
SWK 273	Social Services Practicum III	2
SWK 293	Social Services Seminar III	2
--	Technical Elective***	3
	<b>Total Credit Hours</b>	<b>94</b>

\*ENG 111 and SWK 100 MUST be completed with a C or better before enrolling in additional social service courses (SWK).

\*\*SWK 271 Social Service Practicum I and SWK 291 Social Service Seminar I must be taken together. Students must attend Practicum orientation to be admitted into SWK 271.

\*\*\*Technical electives include: SWK 205, SWK 217, SWK 218, SWK 220, SWK 297 and MST 101. NOTE: Students interested in the field of Chemical Dependency should take both Chemical Dependency Technical Electives: SWK 205 and SWK 217.

## SOCIAL SERVICES DEPARTMENTAL CERTIFICATES

### CHEMICAL DEPENDENCY CERTIFICATE

This certificate is focused on providing 120 clock hours toward the required 270 hours in core coursework that must be earned to become a chemical dependency counselor assistant (COCA) and towards licensure as a licensed chemical dependency counselor (LCDC II) by the Chemical Dependency Professionals Board under the Ohio Department of Alcohol and Drug Addiction Services (ODADAS). SWK 205 and SWK 217 are also technical electives for the Social Work degree.

Course #	Course Title	Credit Hours
SWK 105	Chemical Dependency I: Pharmacology/Physiology of Psychoactive Substances	4
SWK 205	Chemical Dependency II: Counseling Techniques	4
SWK 217	Chemical Dependency III: Special Populations	4
	<b>Total Credit Hours</b>	<b>12</b>

## ASSOCIATE OF ARTS-PRE SOCIAL WORK TRANSFER - WRIGHT STATE UNIVERSITY

The Social Work Transfer program provides curricular options to prepare a student to transfer into the Bachelor of Arts degree in Social Work at Wright State University. It serves as a quarter by quarter guidelines for transfer. It is not designed to prepare students with the skills needed to obtain employment in the field of social work upon completion of this associate degree. Students who wish to obtain employment in the social work field upon completion of an associate degree should follow the Social Services Technology Associate of Applied Science degree that is offered at Clark State.

The program schedules that follow are designed for full-time students who have completed all prerequisites and who have no college preparatory education recommendations. Some individuals, especially part-time students and those taking college preparatory education courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an Associate degree in pre-Social Work, a graduate will be able to meet the goals outlined for the general Associate of Arts degree; additionally, the student will be able to:

- demonstrate familiarity with social welfare policies and processes.
- demonstrate a basic understanding of Social Work profession and practice.
- display and appreciation and respect of diversity.

### Scholastic Preparation

Students entering this program should have taken the college preparatory courses offered by their high schools. Students who did not take this track may require college preparatory classes or additional course work at Clark State. Foreign language proficiency may replace the foreign language courses listed; the student who has taken foreign language courses should consult with advisors at Wright State University regarding this requirement.

### Transfer to Wright State

Admission to Wright State's Social Work program is competitive. Admission requirements include a cumulative GPA of 2.25 or higher, a grade of C or higher in ENG 111 and 112, and completion of the official application to the Social Work program. Students should apply to WSU's Social Work program by January 9th to be considered for admission. Meeting the minimum requirements does not guarantee admission.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ENG 111	English	4
MTH 105	Mathematics and Today's World	3
PSY 111	Psychology I	3

HST 111 or HST 112 or HST 113	Western Civilization	3	^^Students may substitute one of the following Clark State (WSU equivalent) Fine Arts courses: MUS 130 (MUS 214), THE 130 (TH 214), ENG 230 or ENG 231 (ENG 204), or PHL 250 (PHL 204)	
ITS 12W	Beginning Word Processing	1		
ITS 12 S	Beginning Spread Sheet	1		
<b>Winter</b>				
ENG 112	English II	4	^^^Students may choose from the following Clark State (WSU equivalent) courses: Non Western- GEO 220 (CST 221), PHL 240 (CST 232), SOC 220 (CST 241), ART 138 (CST 243), RST 260 (RST 262), RST 270 (RST 271), RST 281 (RST 281); History- HST 111 (HST 101), HST 113 ( HST 103); Great Books- ENG 230 or 231 (ENG 204), PHL 250 (PHL 204)	
BIO 141	Evolution, Diversity and Ecology*	5		
PSY 112	Psychology II	3		
SOC 110	Sociology	3		
ITS 12D	Beginning Data Base	1		
ITS 12P	Beginning Presentation Graphics	1		
<b>Spring</b>				
BIO 142	The Human Organism*	5		
PSY 223	Lifespan Human Growth and Development	5		
SWK 136	Affective Education**	4		
---	Non Western Work Elective***	3		
<b>Fall</b>				
SPN 111	Spanish I	4		
BIO 143	Cell Biology/Genetics*	5		
ECO 110	General Economics	3		
SWK 100	Intro to Social Welfare and Social Work	4		
<b>Winter</b>				
SPN 112	Spanish II	4		
PLS 130	Political Issues	5		
SWK 121	Social Work Methods and Procedures	5		
---	WSU course SW 272-Cultural Competence in a Diverse World^	4		
<b>Spring</b>				
HUM 299	Capstone	3		
SPN 113	Spanish III	4		
ART 130	Appreciation of the Arts^^	3		
---	Area IV Great Books or Area II History or Non-western World Elective^^^	3		
SWK 131	Social Policy and Services for AA Pre-SWK majors	4.2		
<b>Total Credit Hours</b>		<b>98.2</b>		

\*Recommend taking the BIO 141, 142, 143 sequence to meet Natural Science requirement since BIO 141 or BIO 110 is required as one of the natural science courses for this program

\*\*COM 111, Interpersonal Communications may be substituted for SWK 136 Affective Education

\*\*\*Students may choose from the following Clark State (WSU equivalents) courses: GEO 220, (CST 221), PHL 240 (CST 232), SOC 220 (SCT 241, ART 138 (CST 243), RST 260 (RST 262), RST 270 (RST 271), RST 281 (RST 281)

^Students can register in SW 272 at WSU via either SOCHE or dual admission process. Taking this course at WSU while completing your AA degree at Clark State is required to be considered for entry with junior level status into the Social Work program at Wright State.



# Teacher Education Preparation

## EARLY CHILDHOOD EDUCATION TECHNOLOGY

Early Childhood Education - Pre-Kindergarten Licensure  
The Early Childhood Education (ECE) program prepares individuals for employment in licensed child care centers, nursery schools, hospitals, group homes, children's homes and other programs concerned with the well-being, development, and education of the infant, toddler, preschool child and the school-aged child enrolled in a child program.

Graduates of the Early Childhood Education degree work with children, helping them develop into the whole, productive persons they are meant to be.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an associate degree in Early Childhood Education, a graduate will be able to:

- demonstrate knowledge of child development and learning.
- demonstrate knowledge of effective family and community relations.
- demonstrate ability to observe, document and assess young children and families.
- demonstrate teaching and learning processes.
- exhibit professional behaviors and attitude.
- demonstrate proficiency in general education and supportive skills.
- practice an appreciation and respect of diversity.

### Course Format

Selected courses are presented in both traditional and on-line formats. All courses with labs will be conducted on campus regardless of the format. Contact your advisor for further information.

### Overview

Students receive a total of 320 clock hours of supervised experiences in approved early childhood education settings during Practicum I and II. They are given the opportunity to observe and to complete student teaching with young children in the learning environment. Students have the unique opportunity to spend their practicums in the NAEYC-accredited Early Childhood Education Center adjacent to the Leffel Lane Campus, operated by Clark State and Springfield-Clark JVS. Seminars I and II give the students the chance to discuss their experiences and share ideas concerning curriculum planning and behavior management.

### Certification

The Early Childhood Education program is approved by the State Board of Education as meeting all criteria for preparing individuals for pre-kindergarten associate certification. Students who choose to obtain Pre-K certification must meet all guidelines listed in the pre-kindergarten associate certification orientation packet, which is available in the ECE Office.

### Graduation Requirements

A grade of C or better in all ECE, EEP and EDU courses is required for graduation. Requests to repeat technical courses more than once must be approved by the program coordinator. Beginning in 2005, all graduating students must successfully complete the Capstone Course (ECE 292) regardless of their entry date into the program.

### Liability Insurance

Students will be billed for liability insurance for each year of Early Childhood Education courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
<b>Fall</b>		
ECE 101	Professional Development for Educators	1
ECE 102	Intro to Early Childhood Education	4
ECE 114	Art, Music and the Child	3
ENG 111	English I	4
PSY 111	Psychology I	3
SOC 110	Sociology	3
<b>Winter</b>		
ECE 110	Infant/Toddler Education	3
ECE 115	Resources in Early Childhood Education	2
ENG 112	English II	4
PSY 221	Human Growth and Development I	3
EEP 122	Diversity In Education	3
<b>Spring</b>		
ECE 108	Observing and Assessing Young Children	4
ECE 120	Language Development and the Child	3
ECE 250	Positive Guidance: Early Childhood	3
COM 121	Public Speaking	3
ITS 12W	Beginning Word Processing	1
SOC 240	Racial and Cultural Minorities	3
<b>Fall</b>		
ECE 211	Sensory Motor Skills	3
ECE 213	Health, Safety and Nutrition	3
ECE 215	Math/Science Activities	3
ECE 223	Curriculum and Instruction In Early Childhood Education	3
ENG 223	Technical Report Writing	3

**Winter**

EDU 217	Individuals with Exceptionalities	4
ECE 224	School Age Curriculum	3
ECE 271	ECE Practicum I	2
ECE 291	Child Care Seminar I	2
MTH 121	College Algebra I**	3
--	Technical Elective*	3

**Spring**

ECE 225	Professional, Legal, Ethical Issues	2
ECE 230	Organizational Management	3
ECE 272	ECE Practicum II	2
ECE 292	Child Care Seminar II	2
--	Technical Elective*	3
--	Humanities/Social Science Elective(GA)	3

Total Credit Hours 97

\*Technical electives include: ECE 210, ECE 220, ECE 221, ECE 222 or any EEP or EDU course.

\*\*Students may substitute MTH 106 Business Mathematics for MTH 121 College Algebra I.

## EARLY CHILDHOOD EDUCATION-EARLY LITERACY OPTION

The Early Childhood Education (ECE) program prepares individuals for employment in licensed child care centers, nursery schools, hospitals, group homes, children's homes and other programs concerned with the well-being, development, and education of the infant, toddler, preschool child and the school-aged child enrolled in a child program. Graduates of the Early Childhood Education Degree Early Literacy Option are prepared to work with children aged birth to five years in a variety of settings. The focus on early literacy will prepare individuals to work in support roles at the elementary level, or in support and lead roles at the preschool level. An emphasis on beginning reading, writing, comprehension and language development serves as the foundation for this option.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

**Learning Outcomes**

Upon completion of an associate degree in Early Childhood Education-Early Literacy option, a graduate will be able to:

- demonstrate knowledge of child development and learning.
- demonstrate knowledge of effective family and community relations.

- demonstrate ability to observe, document and assess young children and families.
- demonstrate teaching and learning processes.
- exhibit professional behaviors and attitude.
- demonstrate proficiency in general education and supportive skills.
- practice an appreciation and respect of diversity.
- apply knowledge and skills in reading, writing, comprehension and language development.

**Graduation Requirements**

A grade of C or better in all ECE, EEP and EDU courses is required for graduation. Requests to repeat technical courses more than once must be approved by the program coordinator.

**Liability Insurance**

Students will be billed for liability insurance for each year of Early Childhood Education courses.

**Humanities/Social Science Electives**

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
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**Fall**

ECE 101	Professional Development for Educators	1
ECE 102	Intro to Early Childhood Education	4
ECE 114	Art, Music and the Child	3
ENG 111	English I	4
PSY 111	Psychology I	3
SOC 110	Sociology	3

**Winter**

ECE 110	Infant/Toddler Education	3
ECE 115	Resources in Early Childhood Education	2
ENG 112	English II	4
PSY 221	Human Growth and Development I	3
EEP 122	Diversity In Education	3

**Spring**

ECE 108	Observing and Assessing Young Children	4
ECE 120	Language Development and the Child	3
ECE 250	Positive Guidance: Early Childhood	3
COM 121	Public Speaking I	3
ITS 12W	Beginning Word Processing	1
SOC 240	Racial and Cultural Minorities	3

**Fall**

ECE 211	Sensory Motor Skills	3
ECE 213	Health, Safety and Nutrition	3
ECE 220	Early Literacy Development	3
ECE 223	Curriculum and Instruction In Early Childhood Education	3
ENG 223	Technical Report Writing	3

### Winter

EDU 217	Individuals with Exceptionalities	4
ECE 210	Children's Literature	3
ECE 271	ECE Practicum I	2
ECE 291	Child Care Seminar I	2
MTH 121	College Algebra I*	3
ECE 221	Early Literacy Development	3

### Spring

ECE 225	Professional, Legal, Ethical Issues	2
ECE 230	Organizational Management	3
ECE 272	ECE Practicum II	2
ECE 292	Child Care Seminar II	2
ECE 222	Early Literacy Development	3
- -	Humanities/Social Science Elective(GA)	3

Total Credit Hours 97

\*Students may substitute MTH 106 Business Mathematics for MTH 121 College Algebra I.

## EARLY CHILDHOOD EDUCATION-SPECIAL NEEDS OPTION

The Early Childhood Education (ECE) program prepares individuals for employment in licensed child care centers, nursery schools, hospitals, group homes, children's homes and other programs concerned with the well-being, development, and education of the infant, toddler, preschool child and the school-aged child enrolled in a child program. Graduates of the Early Childhood Education degree Special Needs Option work with children, helping them develop into the whole, productive persons they are meant to be. The specialized coursework focusing on early childhood special needs will prepare individuals to work in support roles at the elementary level, or in support and lead roles in preschool programs that serve both typically and atypically developing children. The added focus on special needs will cover a variety of social, emotional, physical and cognitive disabilities and provide effective intervention strategies.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Learning Outcomes

Upon completion of an associate degree in Early Childhood Education-Special Needs option, a graduate will be able to:

- demonstrate knowledge of child development and learning.
- demonstrate knowledge of effective family and community relations.
- demonstrate ability to observe, document and assess young children and families.

- demonstrate teaching and learning processes.
- exhibit professional behaviors and attitude.
- demonstrate proficiency in general education and supportive skills.
- practice an appreciation and respect of diversity.
- apply knowledge and skills to provide effective intervention strategies for a variety of social, emotional, physical and cognitive disabilities.

### Graduation Requirements

A grade of C or better in all ECE, EEP and EDU courses is required for graduation. Requests to repeat technical courses more than once must be approved by the program coordinator.

### Liability Insurance

Students will be billed for liability insurance for each year of Early Childhood Education courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
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#### Fall

ECE 101	Professional Development for Educators	1
ECE 102	Intro to Early Childhood Education	4
ECE 114	Art, Music and the Child	3
ENG 111	English I	4
PSY 111	Psychology I	3
SOC 110	Sociology	3

#### Winter

ECE 110	Infant/Toddler Education	3
ECE 115	Resources in Early Childhood Education	2
ENG 112	English II	4
PSY 221	Human Growth and Development I	3
EEP 122	Diversity In Education	3

#### Spring

ECE 108	Observing and Assessing Young Children	4
ECE 120	Language Development and the Child	3
ECE 250	Positive Guidance: Early Childhood	3
COM 121	Public Speaking I	3
ITS 12W	Beginning Word Processing	1
SOC 240	Racial and Cultural Minorities	3

#### Fall

ECE 211	Sensory Motor Skills	3
ECE 213	Health, Safety and Nutrition	3
ECE 223	Curriculum and Instruction In Early Childhood Education	3
ENG 223	Technical Report Writing	3
---	Special Needs Technical Elective*	3

### Winter

EDU 217	Individuals with Exceptionalities	4
ECE 271	ECE Practicum I	2
ECE 291	Child Care Seminar I	2
MTH 121	College Algebra I**	3
ECE 221	Early Literacy Development	3
---	Special Needs Technical Elective*	3

### Spring

ECE 225	Professional, Legal, Ethical Issues	2
ECE 272	ECE Practicum II	2
ECE 292	Child Care Seminar II	2
---	Special Needs Technical Elective*	3
---	Special Needs Technical Elective*	3
--	Humanities/Social Science Elective(GA)	3
Total Credit Hours		97

\*Contact Early Childhood faculty advisor for list and availability of courses.

\*\*Students may substitute MTH 106 Business Mathematics for MTH 121 College Algebra I.

## EARLY CHILDHOOD EDUCATION-ADMINISTRATION OPTION

The Early Childhood Education Administration option will prepare the graduate to be endorsed as a director of a preschool/child care center.

This option will follow the guidelines of the Ohio Department of Human Services, Licensing Rules, #5101:2-12-25, for a child care administrator.

The Early Childhood Administration graduate will have knowledge of early childhood development theories, developmentally appropriate practice in early childhood and business and management skills.

Students will receive 160 hours of supervised experiences under an administrator in an approved early childhood education program during Practicum II.

Selected courses are presented in both traditional and on-line formats. All courses with labs will be conducted on campus regardless of the format. Contact your advisor for further information.

### Learning Outcomes

Upon completion of an associate degree in Early Childhood Education-Administration option, a graduate will be able to:

- demonstrate knowledge of child development and learning.
- demonstrate knowledge of effective family and community relations.

- demonstrate ability to observe, document and assess young children and families.
- demonstrate teaching and learning processes.
- exhibit professional behaviors and attitude.
- demonstrate proficiency in general education and supportive skills.
- practice an appreciation and respect of diversity.
- apply business and management skills to the Early Childhood Education setting.

### Graduation Requirements

A grade of C or better in all ECE, EEP and EDU courses is required for graduation. Requests to repeat technical courses more than once must be approved by the program coordinator.

### Liability Insurance

Students will be billed for liability insurance for each year of Early Childhood Education courses.

### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 8.

Course #	Course Title	Credit Hours
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#### Fall

ECE 101	Professional Development for Educators	1
ECE 102	Intro to Early Childhood Education	4
ECE 114	Art, Music and Child	3
MGT 112	Principles of Management	4
ENG 111	English I	4
PSY 111	Psychology I	3

#### Winter

ECE 110	Infant/Toddler Education	3
ECE 115	Resources in Early Childhood Education	2
ENG 112	English II	4
PSY 221	Human Growth and Development I	3
EEP 122	Diversity In Education	3

#### Spring

ECE 250	Positive Guidance: Early Childhood	3
MGT 106	Organizational Behavior	4
COM 121	Public Speaking	3
ITS 103	Information Technology Basics	3
SOC 110	Sociology	3

#### Fall

ECE 213	Health, Safety and Nutrition	3
ECE 223	Curriculum and Instruction In Early Childhood Education	3
ACC 111	Principles of Accounting I	4
ENG 223	Technical Report Writing	3
--	Technical Elective*	3

<b>Winter</b>		
EDU 217	Individuals with Exceptionalities	4
ECE 224	School Age Curriculum	3
ECE 271	ECE Practicum I	2
ECE 275	Leadership and Mentoring in Childhood Programs	2
ECE 291	Child Care Seminar I	2
<b>Spring</b>		
ECE 225	Professional, Legal, Ethical Issues	2
ECE 230	Organizational Management	3
ECE 283	Child Care Practicum - Administration	2
ECE 293	Child Care Seminar - Administration	2
SOC 240	Racial and Cultural Minorities	3
- -	Humanities/Soc. Science Elective (GA)	3
	<b>Total Credit Hours</b>	<b>94</b>

\*Technical electives include: ECE 108, ECE 210, ECE 215, ECE 220, ECE 221, ECE 222 or any EEP or EDU course.

### EARLY LITERACY DEVELOPMENT- DEPARTMENTAL CERTIFICATE

This departmental certificate is available for students interested in gaining specialized knowledge in literacy and is intended to expand the core knowledge of in-service teachers. A certificate application form is available in the Health and Human Services Division Office located in the Applied Science Center. This certificate can be completed in one year and can contribute to an existing major.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
<b>Fall</b>		
ECE 220	Early Literacy Development - A	3
<b>Winter</b>		
ECE 210	Children's Literature	3
ECE 221	Early Literacy Development - B	3
<b>Spring</b>		
ECE 222	Early Literacy Development - C	3
ECE 120	Language Development and the Child	3
	<b>Total Credit Hours</b>	<b>15</b>

A grade of C or better must be achieved in all the courses. Limit of three transfer credit hours.

### EARLY ELEMENTARY PARAPROFESSIONAL (TEACHING ASSISTANT)

The Early Elementary Paraprofessional program prepares individuals for employment as educational paraprofessionals in a variety of school settings.

The program follows the guidelines set by the Ohio Department of Education. Graduates of the Early Elementary Paraprofessional program will have knowledge of elementary education theory, best practices and educational standards.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory education requirements, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

#### Learning Outcomes

Upon completion of an associate degree in the Early Elementary Paraprofessional program, a graduate will be able to:

- demonstrate the basic academic skills required to proficiently assist P-12 students in reading, writing and mathematics.
- demonstrate knowledge of how children and youth learn and develop and provide assistance that supports the intellectual, social/emotional and personal development of all learners.
- demonstrate knowledge of the purposes and value of programs for individuals with exceptional learning needs.
- demonstrate knowledge of and apply effective instructional and assessment strategies to assist teaching and learning in a variety of settings.
- use the principles of effective classroom management and individualized behavior interventions.
- follow and use prescribed district or agency policies and procedures, to ensure the safety, health and general well-being of learners.
- demonstrate ability to communicate effectively, follow instructions and use problem solving to work as an effective member of an instructional team.
- practice ethical and professional standards of conduct.
- demonstrate an ability to utilize technology to enrich learning opportunities.

#### Course Format

Selected courses are presented in both traditional and on-line formats. You may also be able to earn credit for your life experiences through the College's Prior Learning Portfolio program. Contact your advisor for further information.

#### Overview

Students receive a total of 160 clock hours of supervised experiences in approved classroom settings during Practicums. They are given the opportunity to observe and to complete practical experiences with children in the learning environment.

Seminars give the students the chance to discuss their experiences and share ideas concerning curriculum planning and behavior management.

**Certification**

The Early Elementary Paraprofessional program is approved by the State Board of Education as meeting all criteria for preparing individuals for an Educational Paraprofessional Associates license.

**Graduation Requirements**

A grade of C or better in all ECE, EDU and EEP courses is required for graduation.

**Liability Insurance**

Students will be billed for liability insurance for each year of Early Elementary Paraprofessional courses.

**Humanities/Social Science Electives**

A complete listing of humanities and social science electives begins on page 8.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
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**Fall**

ECE 101	Professional Development For Educators	1
ECE 102	Introduction to Early Childhood Education	4
ECE 114	Art Music & Young Child	3
ECE 213	Health Safety & Nutrition	3
ENG 111	English I	4
PSY 111	Psychology I	3

**Winter**

EEP 122	Diversity in Education	3
EDU 217	Individuals with Exceptionalities	4
ECE 210	Children's Literature	3
ENG 112	English II	4
PSY 221	Human Growth and Development I	3

**Spring**

ECE 250	Positive Guidance in Early Childhood	3
ECE 120	Language Development & the Child	3
COM 111	Interpersonal Communication	3
ECE 108	Observing and Assessing Young Children	4
ITS 103	Information Technology Basics	3

**Fall**

EDU 110	Introduction to Education	5
ECE 223	Curriculum and Instruction in Early Childhood Education	3
EEP 200	Educational Teaming: Working with Families	3
SOC 110	Sociology I	3
MTH 121	College Algebra I	3
--	Technical Elective*	3

**Winter**

EEP 228	Tutoring and Small Group Instruction	3
COM 121	Public Speaking I	3
ECE 271	Practicum I	2
ECE 291	Seminar I	2
ENG 223	Technical Report Writing	3
--	Technical Elective*	3

**Spring**

EDU 216	Technology for Educators	4
SOC 240	Racial and Cultural Minorities	3
ECE 225	Professional Legal and Ethical Issues	2
ECE 272	Practicum II	2
ECE 292	Seminar II	2

Total Credit Hours	100
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\*Technical electives include ECE 275, ECE 215, ECE 220, ECE 221 and ECE 222

**ASSOCIATE OF ARTS EARLY CHILDHOOD EDUCATION TRANSFER CONCENTRATION**

The Associate of Arts Early Childhood Education Transfer concentration is designed for students who plan to transfer into an Early Childhood Teacher Education program at a four-year college or university. It is not designed to prepare students with all the skills needed to obtain employment in an Early Childhood Education setting upon graduation.

Students seeking an Associate of Arts Early Childhood Education Transfer degree should plan the details of the program at Clark State according to the requirements of the individual transfer Institution. Some of the schools to which students may choose to transfer include: University of Dayton, Urbana University, Wittenberg University, Wright State University and Antioch University McGregor.

Students completing this degree option will satisfy many of the general education courses required for transfer to a four-year teacher preparation program. In addition, students will complete several courses that focus on the foundations of teaching and education, and will prove to be especially helpful to those students interested in teaching at the Kindergarten through third grade levels.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no college preparatory recommendations. Many individuals, especially part-time students and those taking college preparatory requirements, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

**Learning Outcomes**

In addition to meeting the requirements and demonstrating the learning outcomes of the Associate of Arts degree, upon completion of the Early Childhood Education transfer concentration the graduate will be able to:

- demonstrate an understanding of child growth and development
- demonstrate a global understanding of education in the United States and the teaching profession
- promote child development and learning
- display an appreciation and respect of diversity

**Scholastic Preparation**

Teacher Education students need a college-preparatory high school background. Four years each of English, mathematics, science and social studies is strongly recommended; foreign language is highly beneficial. Students with fewer classes in these areas may require college preparatory classes or additional course work at Clark State.

**Transferability**

If you follow the recommended progression of courses listed below, most classes should transfer to most other institutions, but the transfer institutions make the final determinations in acceptance of credits. Students should consult with their academic advisors and their intended transfer institutions for help in planning their schedules.

<b>Course #</b>	<b>Course Title</b>	<b>Credit Hours</b>
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**Fall**

ENG 111	English I	4
PSY 111	Psychology I	3
PHL 200	Critical Thinking	3
ITS 103	Information Technology Basics	3
--	Science*	4 - 5

**Winter**

ENG 112	English II	4
PSY 112	Psychology II	3
PHL 210	Ethics	3
EEP 122	Diversity in Education	3
--	Science*	4 - 5

**Spring**

COM 121	Public Speaking	3
SOC 110	Sociology	3
PSY 221	Human Growth and Development	3
ART 130 or	Appreciation of the Arts or	
THE 130	Introduction to Theatre	3
--	Science*	4 - 5

**Fall**

ENG 230	Great Books	3
HST 111 or		
HST 112 or		
HST 113	Western Civilization	3

HST 121 or		
HST 122 or		
HST 123	American History	3
EDU 110	Introduction to Education**	5
EEP 220	Educational Teaming: Working with Parents	3

**Winter**

STT 264	Statistics I	4
HST 111 or		
HST 112 or		
HST 113	Western Civilization (different number from above)	3

HST 121 or		
HST 122 or		
HST 123	American History (different number from above)	3
EDU 217	Individual with Exceptionalities**	4
EEP 228	Tutoring and Small Group Instruction	3

**Spring**

HUM 299	Capstone Seminar	3
SOC 220	Comparing Cultures or	
SOC 240	Racial and Cultural Minorities	3
--	Literature/Arts Elective ***	3
EDU 216	Technology for Educators**	4
--	Concentration area elective, EDU course, other elective	3

Total Credit Hours 100

\*Science classes chosen must meet either Option 1 or Option 2 in the AA degree, as listed on page XX. Select classes that are compatible with the degree plan at the intended transfer institution.

\*\*TAG courses. In addition, qualified students may have earned Tech Prep credit for EDU 110, 216 or 217.

\*\*\* Literature/Arts electives may be found under category A of the Arts and Humanities portion of the Transfer Module, as listed on page 8.

**ASSOCIATE OF ARTS MIDDLE CHILD OR ADOLESCENT/YOUNG ADULT CONCENTRATION**

See Arts and Sciences section of catalog on page 48.

# Theatre Arts

## THEATRE ARTS

Clark State offers two programs in theatre, both developed in conjunction with Clark State's Performing Arts Center in downtown Springfield. The first option is an associate of arts degree with a technical theatre concentration, which focuses on stagecraft, lighting and sound. Students who enroll in this program should be prepared for entry-level technical careers at the end of two years of full-time study, although some students may choose to transfer to university programs with a technical focus. The other option is an associate of arts degree with a performing arts concentration, which focuses on acting, voice, theatre history, etc. Performance students will most likely transfer to university programs with a performance focus. Students in both programs will be involved with theatrical productions in the Performing Arts Center.

In order to finish their degrees in two years, full-time students should have completed all prerequisites and have no college preparatory requirements. Many individuals, especially part-time students and those taking preparatory courses, will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

### Area 1 - English (8 credit hours)

English I (ENG 111) and English II (ENG 112)

### Area 2 - Literature and the Arts (9 credit hours)

Introduction to Theatre (THE 130) \*, Script Analysis (THE 133), Theatre History I (THE 241) and Creative Writing (ENG 225) or Drama (ENG 245)

### Area 3 - Humanities (9 credit hours)

Western Civilization I (HST 111), II (HST 112), III (HST 113)

### Area 4 - Social Sciences (15 credit hours)

Psychology I (PSY 111), Abnormal Psychology (PSY 230), Sociology (SOC 110), any Regional Studies course (RST), World Regional Geography (GEO 220) or Comparing Cultures (SOC 220)

### Area 5 - Mathematics and Computers (6 credit hours)

Math in Today's World (MTH 105) or College Algebra I (MTH 121); Information Technology Systems requirement of three credit hours (Information Technology Basics (ITS 103) is recommended.)

### Area 6 - Natural Sciences (12-15 credit hours)

Take either a three-course sequence in Biology, Chemistry, Geology or Physics or choose any three laboratory-based courses from the four content areas listed above. The three courses selected must come from three different sciences (example: one class from BIO, CHM and GLG).

## Capstone Seminar

All students pursuing either the AA or AS degree are required to take the Capstone Seminar (HUM 299). Students must have earned at least 60 credit hours prior to taking the course and must take the course for graduation. The course will assess student achievement of specific AA/AS program goals.

In addition to the Capstone Seminar, all students pursuing either the AA or AS degree are required to complete at least 9 credit hours in courses numbered 200 or higher. These classes will typically be in the Concentration or Elective areas, but may also fulfill requirements in Areas 2 - 6 above.

## OPTION ONE - PERFORMANCE THEATRE

Concentration (15-17 credit hours)

Acting I (THE 202)\*, Acting II (THE 203), Speech and Voice for Actors (THE 107), Movement for Actors (THE 140) and Acting III (THE 204)

Electives (15-17 credit hours)

Theatre Arts Tour (THE 166), Theatre History II (THE 242), Theatre History III (THE 243) Stagecraft I (THE 111)\*, Theatre Laboratory I (THE 150), II (THE 151), III (THE 152)\*\*, Theatre electives, Dance electives and Music electives

All performance majors must work in at least one technical position as approved by their advisor to fulfill graduation requirements.

Upon completion of an associate degree in Performing Arts, a graduate will be able to:

- demonstrate competency with basic audition techniques.
- internalize the discipline and professional attitude of a performer.
- analyze a script for the purposes of character development.
- analyze a play's structure, character, themes and production values.
- differentiate among major periods in theatre history.
- demonstrate competency in at least two different areas within the performing arts.

## OPTION TWO - TECHNICAL THEATRE

Concentration (15-17 credit hours)

Stagecraft I (THE 111)\*, II (THE 112), Acting for the Non-major (THE 160), Lighting I (THE 210)

Electives (15-17 credit hours)

Lighting II (THE 211), Sound I (THE 220), Theatre Labs I (THE 150), II (THE 151), III (THE 152)\*\*, Sound II (THE 271), Theatre electives (3-5 credit hours), Theatre History II, Theatre History III



## Learning Outcomes

Upon completion of an associate degree in Technical Theatre, a graduate will be able to:

- analyze a light plot and use it to hang and focus lighting equipment for a production.
- analyze a design package and use it along with scene shop tools to construct and paint a set.
- operate sound equipment and boards and lighting equipment and boards.
- demonstrate competency in fulfilling several roles within the theatre.
- demonstrate an understanding of the roles of all theatre personnel and use correct theatre terminology.
- adhere to theatre safety guidelines.

\*Take during the first quarter at Clark State.

\*\*Up to 6 credit hours may be taken for degree credit.

## THEATRE ARTS DEPARTMENTAL CERTIFICATE

The Arts Administration Certificate is designed to prepare students for entry-level positions in arts administration. General education courses in theatre, as well as arts administration, acting and stagecraft provide a broad overview of the arts. Accounting, marketing and management courses will give the students the business background they need to succeed in arts management. Many of the courses needed for this certificate overlap those required in Business Management and/or Theatre Arts, so students can apply many of the following classes to the requirements for those programs. Also, many of these classes are offered online for students who wish to do their course work at a distance.

### Arts Administration Departmental Certificate

Course #	Course Title	Credit Hours
THE 111	Stagecraft I	4
THE 130	Introduction to Theatre*	3
THE 230	Theatre Management	3
THE 241	Theatre History I* or	
THE 242	Theatre History II* or	3
THE 243	Theatre History III	3
THE 202	Acting I or	
THE 160	Acting for the Non-major	4
ACC 111	Principles of Accounting I	4
ACC 112	Principles of Accounting II	4
MGT 106	Human Relations and Organizational Behavior	4
MGT 112	Principles of Business Management	4
MKT 200	Principles of Marketing	4
	Total Credit Hours	38

\*Humanities elective meeting Global Awareness requirement.



# Course Descriptions

2008  
2009

Now that you've chosen your major, check out the courses that you need to take and get an overview of what you can expect to learn at Clark State.

## COURSE NUMBERING SYSTEM

Alpha prefixes identify the subject area of the course while the number identifies the level. Courses in the 100 series are usually considered first-year courses while courses in the 200 series are usually considered second-year courses. However, students should follow their recommended curriculum guides and the advice of their advisors when making final decisions regarding the level and sequence of courses.

Courses numbered under 100 or identified with the prefix CPE or DEV may not be accepted by other colleges and universities for transfer credit. College Preparatory Education (Developmental) courses do not meet graduation requirements at Clark State.

## PREREQUISITE(S)/COREQUISITE(S)

Some courses require a certain degree of prior knowledge or competence called a prerequisite. For example, a college preparatory education (CPE or DEV) course in reading or mathematics may be considered a prerequisite to most courses or mathematics courses, depending on the student's placement test scores. In other cases prerequisite courses are necessary to enter the second or third course of a sequence.

Sometimes the prior knowledge required for a course can be obtained at the same time as the course itself. In this case, it is called a corequisite. Corequisite courses must be taken during the same term or prior to the selected course.

It is the student's responsibility to be aware of course prerequisites and corequisites which are listed in the course descriptions and also any courses required prior to the listed prerequisite(s). Faculty, in conjunction with the divisional dean or Dean of Student Affairs, may withdraw students who are enrolled in courses for which they do not have the prerequisite(s) or corequisite(s).

## (ACC) Accounting

### ACC 111 Principles of Accounting I (4)

Fundamental accounting concepts, terms, and procedures; analyzing, classifying and recording accounting data; subsidiary ledgers; special journals, adjusting and closing accounts; accounting cycle completion; financial statements; payroll and payroll taxes; control over cash; bank reconciliation.  
Prerequisite(s): CPE 061

### ACC 112 Principles of Accounting II (4)

Accounting for a merchandising business, receivables, inventories, plant and intangible assets. Corporations: organization and equity rights, retained earnings, and dividends. Additional emphasis on financial statements.  
Prerequisite(s): ACC 111

### ACC 113 Principles of Accounting III (4)

Corporations--long term liabilities. Financial statement analysis, statement of cash flows, managerial accounting principles and systems, manufacturing operations and job order cost accounting, differential analysis.  
Prerequisite(s): ACC 112

### ACC 120 Microcomputer Accounting Systems (4)

Integrated accounting systems applications with use of microcomputer as primary tool for maintaining accounting records and financial statement generation. Use of windows-based accounting software. Includes study of both service and merchandising businesses.  
Prerequisite(s): ACC 111 or instructor permission

### ACC 205 Spreadsheet Accounting (4)

Basic accounting applications applied using Microsoft Excel. Financial statement preparation, aging of accounts receivable, loan amortization, ratio analysis, payroll, depreciation, fixed assets covered. Sorting, filtering, formatting emphasized.  
Prerequisite(s): ACC 111, ACC 112, ITS 12S  
Corequisite(s): ACC 113

### ACC 211 Intermediate Accounting I (4)

Review of accounting principles and procedures, including financial reporting, users of financial information, and development of accounting standards. Advanced study of financial statements to include the income statement, retained earnings statement, balance sheet, and statement of cash flows.  
Prerequisite(s): ACC 112

### ACC 212 Intermediate Accounting II (4)

Cash and receivables. Cost of goods sold and inventories including cost allocation, valuation, estimation and non-cost valuation procedures. Noncurrent operating assets including acquisition, utilization, and retirement.  
Prerequisite(s): ACC 113, ACC 211

### ACC 213 Intermediate Accounting III (4)

Current, contingent and long-term liabilities. Owner's equity, including contributed capital and retained earnings. Financial reporting and analysis.  
Prerequisite(s): ACC 212

**ACC 221 Tax Accounting I (4)**

Theory of individual taxes and their application under the Internal Revenue Code. Introduction and preparation of individual tax returns.

Prerequisite(s): CPE 061

**ACC 222 Tax Accounting II (4)**

Introduction to business tax law and its application in the preparation of domestic federal, state and local corporate tax forms. A working knowledge in the preparation of sales, and commercial activity tax returns.

Prerequisite(s): ACC 221

Corequisite(s): ACC 112

**ACC 233 Cost Accounting (4)**

Cost accounting principles including job order cost, process cost and standard cost accounting. Variance analysis and budgeting also covered.

Prerequisite(s): ITS 12S, ACC 113

**ACC 250 Government and Nonprofit Accounting (4)**

Fundamental accounting procedures for nonprofit and governmental institutions. To include state and local governmental accounting, accounting for health care organizations, and accounting for colleges and universities.

Prerequisite(s): ACC 113, ACC 211

## (AGR) Agriculture

**AGR 104 Agricultural Survey and Employment Skills (3)**

Survey of Agriculture Business and Horticulture Industries; career opportunities, goals, employability skills, including resumes, cover letters, interview preparation, professional development, college and degree requirements, student responsibilities; industry expectations.

Prerequisite(s): CPE 061

**AGR 105 Principles of Ag Sales I (3)**

A basic course in sales functions. The role of selling, what it means, and its relationship to marketing. Responsibilities of salespeople as a profession, traits for success, sales skills, and professionalism.

Prerequisite(s): CPE 061

**AGR 106 Principles of Ag Sales II (3)**

An in-depth study of personal selling, including the importance of selling; establishing partnering relationships between salespeople and their customers; ethical and legal responsibilities confronting salespeople; concepts of buyer behavior; communication principles; and techniques in adaptive selling.

Prerequisite(s): AGR 105

**AGR 108 Technical Math for Agriculture (3)**

Development and application of practical mathematic principles in agriculture including algebra, geometry and trigonometry fundamentals with emphasis on applications involving equations, percents, measurements, graphing and problem solving techniques.

Prerequisite(s): CPE 061

**AGR 109 Animal Agriculture (4)**

Introduction to animal science focusing on the economic importance of the livestock and poultry industries. Identification of basic types of livestock related to production, purpose and function. Instruction in feeds and nutrition, animal health and facility requirements.

Prerequisite(s): ENG 111

**AGR 115 Welding (3)**

Introduction to basic principles and practices of shield metal arc and oxyacetylene welding.

Prerequisite(s): CPE 061

Lab Fee: \$25

**AGR 122 Plant Pests (4)**

Identifying insects, diseases, and weeds. A study of pest life cycles, types of damage and natural control.

Prerequisite(s): BIO 140

Lab Fee: \$25

**AGR 133 Turf Science (3)**

Routine cultural practices necessary for growing turf for specialized uses including mowing, fertilization and irrigation.

Prerequisite(s): CPE 061

Lab Fee: \$10

**AGR 143 Landscape Plant Materials (4)**

Recognition of trees, shrubs, ground covers and related plant materials commonly used in landscapes, grounds and golf courses. Usage, design, installation, care and culture of landscape plants utilizing a variety of learning resources.

Prerequisite(s): CPE 061

Lab Fee: \$10

**AGR 145 Herbaceous Plant Materials (4)**

Recognition of annuals, perennials, bulbs and monocots used in the garden and landscape. Usage, design, installation and culture of herbaceous plants in the landscape utilizing a variety of learning resources.

Prerequisite(s): CPE 061

Lab Fee: \$10

**AGR 150 Soil Science (4)**

A basic understanding of soils, the study of soil formation, physical properties, water movement, organic matter and soil organisms.

Prerequisite(s): CPE 061

Lab Fee: \$25

**AGR 151 Soil Fertility (4)**

Principles of soil fertility, plant nutrient requirements, nutrient sources application methods and environmental concerns.

Prerequisite(s): AGR 150

Lab Fee: \$25

**AGR 174 Agribusiness Principles (3)**

Basic management principles for planning, organizing and operating a small agribusiness successfully.

Prerequisite(s): CPE 061

**AGR 187 Small Gas Engines (4)**

Introduction to basic principles of two-cycle and four-cycle small engine operation, applications, maintenance, lubrication, troubleshooting, service and repair.

Prerequisite(s): None

Lab Fee: \$25

**AGR 189 Applied Practices in Agriculture I (1)**

Application of agricultural or horticultural principles and techniques under supervision of college staff and faculty.

Prerequisite(s): CPE 061

**AGR 19B Agricultural Business (4)**

Co-op work experience in Agribusiness career field at industry location. Work site for full-time (40 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, plus minimum of 15 technical hours

**AGR 19E Agricultural Engineering Co-op Experience I (4)**

Co-op work experience in Agricultural Engineering career field at industry location. Work site for full-time (40 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, plus minimum of 15 technical hours

**AGR 19G Golf Course Co-op Experience I (3)**

Co-op work experience in Golf Course Maintenance career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, plus a minimum of 15 technical hours

**AGR 19L Landscape Design Co-op Experience I (3)**

Co-op work experience in Landscape Design career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, plus a minimum of 15 technical hours

**AGR 19N Nursery Operations Co-op Experience I (3)**

Co-op work experience in Nursery Operations career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, plus a minimum of 15 technical hours

**AGR 19P Parks and Recreation Co-op Experience I (3)**

Co-op work experience in Parks and Recreation career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the students with assistance from Agriculture Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, plus a minimum of 15 technical hours

**AGR 19T Turf and Landscape Operations Co-op Experience I (3)**

Co-op work experience in Turf and Landscape Operations career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, plus a minimum of 15 technical hours

**AGR 206 Agribusiness Marketing (3)**

Fundamental principles, policies, problems, structure and strategy of agribusiness marketing. Includes the role of marketing in agribusiness and the development of a marketing plan.

Prerequisite(s): AGR 174, ENG 111

**AGR 214 Crop Production (4)**

Adoption, utilization, cultural practices and cost analysis of major field and forage crops grown in Ohio. Product quality and commercial standards related to production. Computer programs specific to crop production inputs.

Prerequisite(s): BIO 140, ENG 111

Lab Fee: \$10

**AGR 219 Landscape Construction (4)**

Fundamental principles, theories and practices of landscape construction. Site plan and preparation, safety principles, tool use and identification, landscape and construction materials, job bid development and project management.

Prerequisite(s): CPE 061

Lab Fee: \$25

**AGR 224 Irrigation Systems (3)**

Irrigation system operation and design. Primary emphasis is toward turf and horticultural applications.

Prerequisite(s): CPE 061

Lab Fee: \$25

**AGR 225 Landscape Maintenance (4)**

Practices involved in the maintenance of landscape sites. Pruning, transplanting, mulching, watering and general plant care.

Prerequisite(s): CPE 061

Lab Fee: \$25

**AGR 226 Landscape Design (4)**

A basic study of landscape design concepts with emphasis on site planning, design principles, plant utilization and irrigation systems

Prerequisite(s): CPE 061

Lab Fee: \$20

**AGR 231 Plant Propagation (4)**

Principles, techniques, materials, and necessary facilities needed by commercial horticulture growers to propagate floral, greenhouse and landscape plants.

Prerequisite(s): CPE 061

Lab Fee: \$25

**AGR 236 Turfgrass Management (3)**

Management of turfgrass culture practices as applied to various turfgrass industries. Includes equipment selection and maintenance, fertilizer and pest management, scheduling, record keeping and budgeting.

Prerequisite(s): AGR 133

Lab Fee: \$20

**AGR 245 Advanced Welding (4)**

Introduction and application of the principles of DC SMAW (direct current-shielded metal arc), MIG (metal inert gas) and TIG (tungsten inert gas) welding.

Prerequisite(s): None

Lab Fee: \$25

**AGR 252 Equipment Maintenance and Operation (4)**

Practical development of best practices for selection, maintenance and operation of a green-industry equipment fleet. Development of service schedules, utilization of current technology and successful operational strategies for equipment resources.

Prerequisite(s): None

Lab Fee: \$25

**AGR 253 Pest Management (5)**

Managing pest problems through approved practices of control using cultural, biological and chemical methods including the safe use, handling and application of pesticides. Individualized study of the student's special area of interest.

Prerequisite(s): AGR 122

Lab Fee: \$15

**AGR 262 International Ag Trade (3)**

A study of agriculture and food policy both in the U.S. and internationally. The implications of world trade and political aspects of world food production. Food and agriculture problems, policy alternatives and their consequences.

Prerequisite(s): None

Corequisite(s): ENG 112

**AGR 284 Agribusiness Management (4)**

In-depth coverage of both creating and managing an agribusiness. Emphasis is on the steps necessary for creating a business plan.

Prerequisite(s): AGR 174, ENG 111

Corequisite(s): ENG 112

**AGR 287 Computer Aided Landscape Design (4)**

Two-dimensional computer aided landscape plans. Generate hardscapes and place plant material in digital format utilizing on-line and computerized library material. Create orthographic views from digital models, and/or from computer aided landscape site plans. Utilize automated project estimation tools.

Prerequisite(s): AGR 297 & DFT 211

Lab Fee: \$15

**AGR 289 Applied Practices in Agriculture II (1)**

Application of agricultural or horticultural principles and techniques under supervision of college staff and faculty.

Prerequisite(s): AGR 189

**AGR 295 Agriculture Capstone Seminar (3)**

Application of knowledge and skills learned in previous coursework and industry experience. Use of problem-solving skills to respond to a series of real world industry scenarios. Off-site casework may be required.

Prerequisite(s): AGR 151, 284, Co-op, plus 45 technical hours

Lab Fee: \$10

**AGR 297 Landscape Design II (4)**

Advanced study of landscape design concepts with emphasis on planning, designing and pricing diversified landscapes.

Prerequisite(s): AGR 226

Lab Fee: \$20

**AGR 298 Applied Practices in Agriculture III (1)**

Application of agricultural or horticultural principles and techniques under supervision of college staff and faculty.

Prerequisite(s): AGR 289

**AGR 29B Agribusiness Co-op Experience II (4)**

A second co-op work experience in chosen Agribusiness career field at industry location. Work site for full-time (40 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience or project required.

Prerequisite(s): AGR 104, AGR 19B

**AGR 29E Agricultural Engineering Co-op Experience II (4)**

A second co-op work experience in Agricultural Engineering career field at industry location. Work site for full-time (40 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience or project are required.

Prerequisite(s): AGR 104, AGR 19E

**AGR 29G Golf Course Co-op Experience II (3)**

A second co-op work experience in Golf Course Maintenance career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience or project required.

Prerequisite(s): AGR 104, AGR 19G

**AGR 29L Landscape Design Co-op Experience II (3)**

A second co-op work experience in Landscape Design career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience or project required.

Prerequisite(s): AGR 104, AGR 19L

**AGR 29N Nursery Operations Co-op Experience II (3)**

A second co-op work experience in Nursery Operations career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience or project required.

Prerequisite(s): AGR 104, AGR 19N

**AGR 29P Parks and Recreation Co-op Experience II (3)**

Co-op work experience in parks and recreation career field at industry location. Work site for full-time (40 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience required.

Prerequisite(s): AGR 104, AGR 19P

**AGR 29T Turf and Landscape Operations Co-op Experience I (3)**

Co-op work experience in Turf and Landscape Operations career field at industry location. Work site for part-time (30 hours) work for 10 weeks selected by the student with assistance from Ag Co-op instructor. Oral and written reports of the experience or project required.

Prerequisite(s): AGR 104, AGR 19T

## (ART) Art

**ART 111 Drawing I (3)**

Explores the use of line value, shape and color in developing visual drawing skills. Two and three-dimensional problems are given. Also included is the study of location of forms in space, their proportion and structure with light and shade as well as perspective.

Prerequisite(s): CPE 061

Lab Fee: \$5

**ART 112 Drawing II (3)**

Continuing representational and contemporary problems with complex composition arrangements, wet/dry media and simple color drawing to develop visual skills. Use of still life, landscape and introduction to some figure work. Explores the use of line, value, shape and color in developing visual drawing skills. Study of location of forms in space, their proportion and structure with light and shade as well as perspective. Introduction to figure drawing.

Prerequisite(s): ART 111

Lab Fee: \$5

**ART 113 Drawing III (3)**

Interpretation of the figure using wet and dry media, black and white and simple color. For both fine and graphic design artists.

Prerequisite(s): ART 112

Lab Fee: \$20

**ART 114 Drawing IV (3)**

Continued interpretation of the figure. Emphasis is placed on increasing the drawing vocabulary and the development of personal approaches to the medium.

Prerequisite(s): ART 113

Lab Fee: \$20

**ART 130 Appreciation of the Arts (3)**

Awareness and aesthetic appreciation of literature, painting, sculpture, architecture, music and dance within an historical context. Individual works used to illustrate the nature and problems of the creative experience and its relationship to the historical, cultural and social environment.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass Score

Corequisite(s): ENG 111

**ART 133 Art History I (3)**

Survey of visual art from medieval times to Renaissance. Introduction to basic concepts of visual and stylistic analysis.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**ART 134 Art History II (3)**

Survey of visual art from the Renaissance to beginnings of the modern era, including impressionism.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**ART 135 Art History III (3)**

Survey of visual art during post impressionist through the twentieth century.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**ART 213 Painting I (3)**

Color principles studied with application to transparent painting on paper. Form, space and color studied as they apply to water-based paints. Still life, landscape and figure work studied as themes.

Prerequisite(s): ART 113, GPH 105

Lab Fee: \$10

**ART 214 Painting II (3)**

Basic color principles studied and applied in opaque painting. Various approaches to application explored as well as study of form, space, composition and technique.

Prerequisite(s): ART 213

Lab Fee: \$10

**ART 215 Painting III (3)**

The continued study of painting as an expressive medium. Exploration in technique and the development of personal approaches are encouraged. Student can select medium and subject.

Prerequisite(s): ART 214

Lab Fee: \$10

**ART 216 Painting IV (3)**

An advanced study of painting as an expressive medium. Exploration in technique and the development of personal approaches are expected. Student selects medium and subject.

Prerequisite(s): ART 215

Lab Fee: \$10

## **(ATI) Advanced Technical Intelligence**

### **ATI 101 Introduction to the Intelligence Community (3)**

Origins and structure of the current U.S. Intelligence Community (IC). Key intelligence agencies and their functions, roles and missions. Facets of the intelligence production cycle, including tasking, collecting and processing. Exploitation/analysis and dissemination of intelligence data. U.S. citizenship required.

Prerequisite(s): CPE 062, CPE 072

Lab Fee: \$495

### **ATI 110 Fundamentals of Remote Sensing in Intelligence (3)**

Science and underlying phenomenology of remote sensing. Remote sensing collection system; how it interacts with the environment while collecting information from that environment. U.S. citizenship required.

Prerequisite(s): CPE 062, CPE 072, MTH 121, MTH 140; PHY 105 or (CHM 110 and PHY 110) or (high school chemistry and physics) within last three years

Lab Fee: \$495

### **ATI 210 Introduction to Spectral Sensing w/ Applications in Intelligence (3)**

Science and technology behind Spectral Remote Sensing. Underlying phenomenology being sensed. How information is collected. Advantages and disadvantages of the technology. U.S. citizenship required.

Prerequisite(s): ENG 111, MTH 121, MTH 140; PHY 105 or (CHM 110 and PHY 110) or (high school chemistry and physics) within last three years

Lab Fee: \$495

### **ATI 215 Introduction to Radar for MASINT (3)**

Underlying principles of radar. How Over-the-Horizon and Line-Of-Sight radar can be used as a MASINT (Measurement and Signature Intelligence) sensor. How radio waves are created and propagated. How radio waves interact with an object and are returned to the radar. How radar interprets the returned energy. U.S. citizenship required.

Prerequisite(s): ENG 111, MTH 121, MTH 140; PHY 105 or (CHM 110 and PHY 110) or high school chemistry and physics within last three years

Lab Fee: \$495

### **ATI 220 Introduction to Overhead Non-Imaging Infrared (ONIR) (3)**

Role of ONIR in National Defense. Data collection, processing and exploitation. Advantages and disadvantages of ONIR as a remote sensing tool. U.S. citizenship and security clearance required.

Prerequisite(s): ENG 112, MTH 121, MTH 140; PHY 105 or (CHM 110 and PHY 110) or (high school chemistry and physics) within last three years

Lab Fee: \$495

### **ATI 225 MASINT Fundamentals (3)**

Overview of MASINT (Measurement and Signature Intelligence) disciplines: Chemical, Biological, Radiological and Nuclear; Seismic and Acoustic; Geophysical; Materials; Radio Frequency. U.S. citizenship and security clearance required.

Prerequisite(s): ENG 112, MTH 121, MTH 140; PHY 105 or (CHM 110 and PHY 110) or (high school chemistry and physics) within last three years

Lab Fee: \$495

## **(BIO) Biology**

### **BIO 105 Fundamentals of Anatomy and Physiology (4)**

The human body's structure and function with emphasis on major body systems.

Prerequisite(s): CPE 061 or appropriate Compass score

### **BIO 110 Fundamentals of Human Biology (4)**

The human organism: structure and organization, integrity and homeostasis, metabolism, responsiveness, reproduction, growth and development. Aging, diseases and disorders included.

Prerequisite(s): CPE 061 and CPE 091

Lab Fee: \$40

### **BIO 118 Muscle Function (2)**

Study of skeletal structure and function and the origin, insertion and action of trunk and extremity musculature. Introduction to palpation and muscle function during laboratory activities.

Prerequisite(s): CPE 061 or appropriate Compass score, instructor permission

Corequisite(s): BIO102

### **BIO 121 Anatomy and Physiology I (4)**

Human cells, tissues, skin, bones, muscles, nervous system cells, autonomic nervous system.

Prerequisite(s): CHM 115 or CHM 114

Corequisite(s): MST 105

Lab Fee: \$25

### **BIO 122 Anatomy and Physiology II (4)**

Human circulatory, respiratory, urinary, digestive systems, acid-base and fluid and electrolyte balance, metabolism.

Prerequisite(s): MST 105, BIO 121

Lab Fee: \$25

### **BIO 123 Anatomy and Physiology III (4)**

Central and peripheral nervous system, special senses, endocrine and lymphatic systems, immunity, reproduction and development.

Prerequisite(s): BIO 122

Lab Fee: \$25

### **BIO 131 Microbiology I (4)**

Study of bacteria, fungi, protista, rickettsiae, chlamydia, viruses and helminths. Emphasis on bacteria and their relationship to health.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$90



**BIO 140 Plant Science (4)**

Basic structure and function of plants, including growth, vegetative, and reproductive structures, heredity, photosynthesis, respiration and the control of growth and development.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

Lab Fee: \$40

**BIO 141 Evolution, Diversity and Ecology (5)**

Evolution, diversity and ecology of organisms. Processes by which organisms change over time, the diversity of life that results from such changes and the adaptations that occur allowing organisms to exist in a changing environment.

Prerequisite(s): CPE 061 or appropriate Compass score.

Lab Fee: \$40

**BIO 142 The Human Organism ( )**

The human as organism; a comparative look at structure, function and behavior.

Prerequisite(s): CPE 061 or appropriate Compass score.

Lab Fee: \$40

**BIO 143 Cell Biology/Genetics (5)**

Cell biology and genetics. Cellular molecules, cellular anatomy, cellular processes including respiration and photosynthesis, cellular reproduction. Mendelian and molecular genetics.

Prerequisite(s): CPE 061 or appropriate Compass score, high school chemistry or instructor permission.

Lab Fee: \$40

**BIO 151 Evolution and Ecology (4)**

Evolution, diversity and the ecology of organisms. This course will cover processes by which biological life changes over time, the diversity of life that result from these changes and the adaptations that occur. Ecology and environmental issues will be covered as well. This is the first course in a university parallel sequence for biology and science majors.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$40

**BIO 152 Human and Animal Anatomy (4)**

Topics to include: the human organism, a comparative look at structure, function and behavior. Human body systems, problems with these systems, and the evolutionary significance of these systems. Diseases of the human body. This is the second course in a university parallel sequence for biology and science majors.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$40

**BIO 153 Cellular Biology and Genetics (4)**

Topics to include cell biology and genetics, cellular molecules, cell anatomy, cellular processes, photosynthesis, cellular respiration, cell division, mendelian and molecular genetics. DNA technologies and bioethical issues. This is the third course in a university parallel sequence for biology and science majors.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$40

**BIO 230 Biomechanics (4)**

The science of human motion and the systematic application of mechanical laws to movement. Includes fundamentals of posture, gait analysis, continuation of palpation; professional behavior. Laboratory practice.

Prerequisite(s): BIO 118, BIO 121, PTA 120

Corequisite(s): BIO 122, PTA 145

Lab Fee: \$15

**BIO 295 Special Topics in Biology: Field Experience (1)**

This course is required to be taken concurrently with BIO 110 and BIO 111, Fundamentals of Biology and Biology for transfer students only. Course will consist of an eight (8) hour Saturday field experience along with an assigned project.

Prerequisite(s): CPE 061

Corequisite(s): BIO 110 & BIO 111

**(CHM) Chemistry****CHM 110 Fundamentals of Chemistry (5)**

Concepts in chemistry for students in non-science majors. Classification and properties of matter, atomic structure and periodicity, ionic and covalent compounds, moles and molarity, acids and bases, energy in chemical reactions, introduction to nuclear, organic and biochemistry. Laboratory meetings: 2 hours/week.

Prerequisite(s): CPE 061 and CPE 101 or appropriate Compass score

Lab Fee: \$15

**CHM 114 Introduction to General Chemistry Review (4)**

Intended as a review course prior to taking General Chemistry (CHM 121) for students who have completed high school chemistry. Introduction to the composition, structure, properties and transformations of matter, including dimensional analysis, atomic structure, bonding, chemical reactions, states of matter, energy changes, solutions, reaction rates and chemical equilibrium, acids and bases.

Prerequisite(s): CPE 061 and CPE 101 or appropriate Compass score, For AS students CPE 103 is highly recommended.

Corequisite(s): ENG 111

**CHM 115 Introduction to General Chemistry (5)**

Intensive preparation (equivalent to a year of high school chemistry) for General Chemistry (CHM 121). Introduction to the composition, structure, properties and transformations of matter, including dimensional analysis, atomic structure, bonding, chemical reactions, states of matter, energy changes, solutions, reaction rates and chemical equilibrium, acids and bases. Laboratory meetings: 2 hours/week.

Prerequisite(s): CPE 061, CPE 101 or appropriate Compass score. For AS Students CPE 103 is highly recommended.

Corequisite(s): ENG 111

Lab Fee: \$15

### **CHM 116 Introduction to Organic and Biological Chemistry (5)**

Introduction to the structures, chemical and physical properties of hydrocarbons, alcohols, phenols, ethers, aldehydes, ketones, carbohydrates, carboxylic acids, esters, lipids, amides, amino acids, proteins. Introduction to the role of enzymes and vitamins in metabolism. Emphasis on health-related applications. Laboratory meetings: 2 hours/week.

Prerequisite(s): CPE 101 or appropriate Compass score and CHM 114 or CHM 115 or high school chemistry within 5 years

Corequisite(s): ENG 111

Lab Fee: \$20

### **CHM 121 General Chemistry I (5)**

Basic chemical principles of elements, compounds and mixtures. Theory, principles and applications of structure of atoms, molecules, formula units including bonding and VSEPR. Principles and applications of stoichiometry, reactivity, energy and thermochemistry. Laboratory meetings: 3 hours/week.

Prerequisite(s): CPE 071 or app. Compass score & CHM 115 or HS chemistry and passing chemistry placement test, CPE 103, or app score on the math placement test.

Corequisite(s): MTH 120 or MTH 121 and ENG 111

Lab Fee: \$30

### **CHM 122 General Chemistry II (5)**

Theory, principles and applications of properties of solids, liquids and gases including gas laws, phase changes and colligative properties. Theory, principles and applications of chemical reactions including chemical kinetics, chemical equilibrium, acids, bases, applications of equilibrium (buffers, common ion effect, solubility products) thermodynamics. Laboratory meetings: 3 hours/week.

Prerequisite(s): CHM 121 and ENG 111

Corequisite(s): MTH 122 and ENG 112

Lab Fee: \$30

### **CHM 123 General Chemistry III (5)**

Theory, principles and applications of quantitative and descriptive chemistry emphasizing: electrochemistry, main group chemistry, coordination chemistry, solid state chemistry, nuclear chemistry, organic chemistry and biochemistry. Laboratory meetings: 3 hours/week.

Prerequisite(s): CHM 122

Lab Fee: \$30

### **CHM 211 Organic Chemistry I (5)**

Nomenclature, structure and stereochemistry of carbon compounds. Chemical and physical properties of alkanes and cycloalkanes and related compounds. Infrared spectroscopy and nuclear magnetic resonance. Laboratory meetings: 3 hours/week.

Prerequisite(s): CHM 123

Lab Fee: \$35

### **CHM 212 Organic Chemistry II (5)**

Chemical and physical properties of unsaturated hydrocarbons, oxygen containing carbon compounds, aromatic compounds and their derivatives, organic synthesis of polymers. Laboratory meetings: 3 hours/week.

Prerequisite(s): CHM 211

Lab Fee: \$35

### **CHM 213 Organic Chemistry III (5)**

Polycyclic compounds, amines and related compounds. Chemistry of biomolecules and biochemical synthesis and metabolism. Laboratory meetings: 3 hours/week.

Prerequisite(s): CHM 212

Lab Fee: \$35

## **(COM) Communication**

### **COM 111 Interpersonal Communication (3)**

Introduction to intrapersonal and interpersonal communication processes, focusing on effective ways of expressing oneself and understanding others through various communication theories. We will look at listening, understanding the self, conflict, power, perception, etc.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): CPE 071

### **COM 121 Public Speaking I (3)**

Introduction to public speaking processes which are designed to help individuals communicate effectively in a variety of speaking situations. This course focuses on developing, organizing, preparing, delivering and analyzing public presentations. The online course is not recommended for those students who suffer from speech anxiety.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

### **COM 131 Introduction to Mass Communication (3)**

A study of newspapers, radio, television, magazines, public relations, advertising, photo journalism and allied topics as well as the analysis of forces and institutions affecting media behavior and the resulting quality of performance.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

### **COM 200 Basic Reporting and News Writing (3)**

A beginning course in reporting and news writing with an emphasis on journalistic style and grammar, basic news story structure, the interview, coverage of speeches and meetings and elementary feature writing for print and electronic media. Also examine laws and ethics.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **COM 221 Public Speaking II (3)**

Presentation design with an emphasis on elements of argumentation, building a strong case with appropriate evidence, order of arguments and delivery for a specific audience outcome

Prerequisite(s): COM 121

Corequisite(s): ENG 112

### **COM 270 Communication Internship (3)**

A planned, structured, work experience in a professional work setting. Apply classroom theory and acquire new knowledge and skills. Learn about, react to and write about internship organization and internship experience.

Prerequisite(s): Minimum of 60 credit hours and ENG 112

## **(COR) Correction**

### **COR 100 Introduction to Corrections (4)**

Survey of the corrections system, including history and growth; role in the criminal justice system; components of the correctional process; local, state, and federal corrections establishments; structures and operations; present and future issues.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): CRJ 100

### **COR 105 Probation and Parole (4)**

History and philosophy of probation, aftercare and other community programs for juvenile and adult offenders; function and philosophy of parole, current laws and case studies.

Prerequisite(s): COR 100

Corequisite(s): CRJ 120

### **COR 130 Adult/Juvenile Corrections (4)**

Facilities, programs and procedures for detention and incarceration; variations due to age, sex, offense of individual, social structure of facilities; humanistic control of incarcerated persons.

Prerequisite(s): COR 100, CRJ 120

### **COR 280 Jail Practicum (4)**

Field service training, educational experience through appropriate observation and work assignment to witness function and operation of the jail, case laws, current trends.

Prerequisite(s): COR 130, COR 100, CRJ 120

### **COR 281 Juvenile Institutions Practicum (4)**

Field service training, designed to broaden educational experience through appropriate observation and work assignment in state-operated juvenile correction facilities.

Prerequisite(s): COR 280

### **COR 282 Adult Institutions Practicum (4)**

Field service training, designed to broaden educational experience through appropriate observation and work assignment in state-operated adult corrections facilities.

Prerequisite(s): COR 280

## **(CPE) College Preparatory Education**

### **CPE 061 Reading Comprehension I (4)**

A semi-individualized program of reading skill development, including general reading comprehension, vocabulary development and study skills strategies. Institutional credit only.

Prerequisite(s): Reading Placement test score below the CSCC standard

### **CPE 062 Reading Comprehension II (4)**

A continuation of reading skill development begun in CPE 061, including general reading comprehension, vocabulary development and study skills strategies. Institutional credit only.

Prerequisite(s): Reading Placement test score below the CSCC standard or CPE 061

### **CPE 071 Writing Fundamentals (4)**

This course is designed to prepare students for the writing skills and requirements of English 111 and 112 as well as the specific writing needs for their individual areas of concentrated study. The course attempts to improve sentence and writing skills by combining exercises in grammar and mechanics and weekly writing assignments. Development of topic and ideas to support topic sentences in an organized and coherent manner will also be covered as well as a basic essay. Institutional credit only.

Prerequisite(s): Writing Placement test result below the CSCC standard

### **CPE 072 Writing Fundamentals II (4)**

This course attempts to build on the writing skills of students at the sentence and paragraph level while introducing the students to a variety of essay formats, language issues and basic library research.

Prerequisite(s): CPE 071 with a grade of "C" or appropriate COMPASS score

Corequisite(s): CPE 062 or appropriate COMPASS score

### **CPE 091 Math Fundamentals (4)**

Topics include whole numbers, mixed numbers, fractions, decimals, percentages, ratios and proportions and the metric system. Institutional credit only.

Prerequisite(s): Math placement test score below the CSCC standard

### **CPE 101 Introductory Algebra I (4)**

An introduction to basic algebra including operations with integers, solving linear and literal equations, solving various application/word problems and operations with polynomials. Institutional credit only.

Prerequisite(s): CPE 091 or Algebra Placement test score below the CSCC standard

### **CPE 102 Introductory Algebra II (4)**

Topics include factoring of polynomials, operations on rational expressions, solving equations containing rational expressions (with applications), graphs of points and lines, slope and linear systems in two variables. Institutional credit only.

Prerequisite(s): CPE 101 or Algebra Placement Test score below the CSCC standard

### **CPE 103 Introductory Algebra III (4)**

Selected topics from plane geometry with applications; positive, negative, and fractional exponents; scientific notation; simplifying, rationalizing and operations with radicals; quadratic equations with applications; introduction to functions and graphing. Institutional credit only.

Prerequisite(s): Algebra Placement test score below the CSCC standard

## **(CRJ) Criminal Justice**

### **CRJ 100 Introduction to Criminal Justice (4)**

Overview of the criminal justice system's history, development and evolution including subsystems of police, courts and corrections.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 112 Traffic Management (3)**

The principles of traffic control, accident reconstruction and enforcement of the law.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 116 Systems Approach to Computer Technology (3)**

The management of police departments through computer applications, using data base, electronic spreadsheet and other commercial software.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$60

### **CRJ 118 Forensic Photography (3)**

The application of photography to criminal and civil investigations, including the preparation of courtroom presentation.

Prerequisite(s): PHO 111

Lab Fee: \$25

### **CRJ 120 Juvenile Procedures (3)**

The juvenile justice system's parts and subcultures; causative factors of, prevention of and treatment programs for juvenile delinquency.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 123 Patrol Operations (3)**

A comprehensive study of police patrol operations, including vehicle patrol techniques, foot patrol, crimes in progress, prowler calls, building searches and stops and approaches.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 125 Community Policing (3)**

Principles of community policing including youth focused activities, community based crime prevention, reorientation of patrol, police/public accountability and decentralizing police decision making.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 201 Police Administration (3)**

Examination of administrative design, including personnel selection, training, advancement, discipline and utilization of resources.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 216 Community Relations (3)**

The development of skills to resolve communication problems between citizens and the police.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 221 Forensic Science I (5)**

The search for, recognition of and preservation of physical evidence found at crime scenes.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$15

### **CRJ 223 Forensic Science II (5)**

Familiarization with selected laboratory techniques commonly used by law enforcement agencies.

Prerequisite(s): CRJ 221

Lab Fee: \$15

### **CRJ 226 Interview and Interrogation (3)**

Examines the dynamics of the art of interviewing and interrogation of witnesses, victims and suspects.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 228 Criminal Investigation (3)**

Reconstruction of the sequences of a criminal act, including searching, preserving and evaluating physical evidence.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 230 Social Justice (3)**

Exploration of job stresses; the social value and ethics of the criminal justice process.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 231 Criminal Law (3)**

Overview of the criminal procedures, criminal law, common defense and prosecutorial processes.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 232 Ohio Criminal Code (3)**

The explanation of Ohio's statutory code; elements of offenses and lesser included offenses.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 250 Community Resources (3)**

A service learning class where the student will weekly participate in two hours of seminar discussion and 8 hour of practicum in a related field. The student will learn what resources are available to police officers such as homeless shelters, detoxification centers and food pantries.

Prerequisite(s): CPE 061 or appropriate Compass score

### **CRJ 280 Practicum (3)**

Supervised work experience in criminal justice agencies for purpose of increasing student understanding of the criminal justice process.

Prerequisite(s): CRJ 100, CRJ 112, CRJ 116, CRJ 118, CRJ 120, CRJ 123, CRJ 125, CRJ 201, CRJ 216, CRJ 221, CRJ 222, CRJ 226, CRJ 228, CRJ 231

### **CRJ 287 Basic Law Enforcement I (8)**

Law enforcement skills and techniques to fulfill partial requirements for peace officer training certification as required by the Attorney General's office and the Ohio Peace Officer's Training Council.

Prerequisite(s): None

Corequisite(s): CRJ 289

Lab Fee: \$545

### **CRJ 289 Basic Law Enforcement II (8)**

Law enforcement skills and techniques to fulfill partial requirements for peace officer training certification as required by the Attorney General's Office and the Ohio Peace Officer's Training Council.

Prerequisite(s): None

Corequisite(s): CRJ 287

Lab Fee: \$545

# **(CSD) Computer Software Development**

## **CSD 105 Programming Fundamentals (4)**

Fundamental programming constructs and concepts. Includes the study of variables, constants, looping, strings, flowcharting basics, programming logic and data validation techniques.

Introduction to object-oriented programming.

Prerequisite(s): Equivalent to ITS 080, CPE 061

Lab Fee: \$20

## **CSD 106 Introduction to Scripting Languages (4)**

An Introduction to fundamentals of scripting languages used to build Web application components.

Prerequisite(s): CSD 105, ITS 115, CPE 091

## **CSD 121 Visual Basic Programming I (4)**

Programming concepts and techniques including input/output, arithmetic and logic operations, looping, file handling, report generation, data types and structures. Practical applications written, entered, tested and debugged using principles of the Visual Basic programming language.

Prerequisite(s): CSD 105, CPE 091

Lab Fee: \$20

## **CSD 122 Visual Basic Programming II (4)**

Advanced Visual Basic programming techniques. Builds on concepts learned in Visual Basic Programming I.

Prerequisite(s): CSD 121

Lab Fee: \$20

## **CSD 140 Database Design and Implementation (4)**

Step-by-step approach to learning Structured Query Language (SQL). Topics include: data definition, table maintenance, queries, reports and database administration. Database design theory--specifically relational databases.

Prerequisite(s): ITS 12D

Lab Fee: \$20

## **CSD 145 Unix Concepts (4)**

Broad background of concepts, facilities and characteristics of contemporary operating systems. Surveys at a conceptual level and offers examples of the role, scope and complexity of operating systems. Concentration on the Linux operating system.

Prerequisite(s): CSD 105, CPE 091

Lab Fee: \$10

## **CSD 150 Database Administration (5)**

Install and configure a MS SQL Server Database. Manage and maintain data, configure and manage security, monitor and maintain database and troubleshoot problems.

Prerequisite(s): ITS 110 or CSD 140, CPE 101

Lab Fee: \$10

## **CSD 160 Database Design (5)**

Database design theory (specifically back-end relational databases utilizing MS SQL Server). Database structure; programming databases using transact-SQL. Basic and advanced topics regarding database creation/manipulation/report production/user interfaces. Designing and Implementing databases with MS SQL Server 7.0.

Prerequisite(s): ITS 110 or CSD 140, CPE 101

Lab Fee: \$10

## **CSD 201 Oracle Database Development I (5)**

Oracle Database applications development. Emphasizes client/server database architecture. Integration of content and theory with tutorial exercises.

Prerequisite(s): CSD 140 or ITS 110 or instructor permission

Lab Fee: \$20

## **CSD 202 Oracle Database Development II (5)**

Database development activities using SQL commands. PL/SQL programming. Advanced Forms Builder and Reports.

Prerequisite(s): CSD 201

Lab Fee: \$20

## **CSD 214 C# Concepts I (4)**

Knowledge and skills needed to develop C# applications for the Microsoft.NET Platform. Focuses on C# program structure, language, syntax, and implementation details. Object-oriented and type-safe programming language concepts.

Prerequisite(s): CSD 105 or instructor permission

Lab Fee: \$10

## **CSD 215 C# Concepts II (4)**

Knowledge and skills needed to build Windows applications. Utilization of the Microsoft.NET Framework. Topics to include Windows Forms, GDI+, threading, simple remoting, etc. Security and deployment issues.

Prerequisite(s): CSD 214 or instructor permission

Lab Fee: \$10

## **CSD 220 Systems Analysis (4)**

Integration of principles from management information systems theory and data processing to identify managerial information needs. Development of systems to provide that information. Topics include: information gathering tools and techniques, analysis tools and techniques, and project management tools and techniques. A structured approach to development of information systems.

Prerequisite(s): CSD 105, CPE 101

Lab Fee: \$10

## **CSD 222 Systems Design (4)**

Design of computer-based information systems. Requirements, methodology and technical skills related to system specification, system design, development and documentation.

Prerequisite(s): CSD 220

Lab Fee: \$10

**CSD 224 Java Concepts I (4)**

Programming concepts and techniques including input/output, arithmetic and logic operations, looping, file handling, report generation, data types and structures. Practical applications written, entered, tested and debugged using principles of the Java programming language.

Prerequisite(s): CPE 101, CSD 105 or instructor permission  
Lab Fee: \$20

**CSD 225 Java Concepts II (4)**

Advanced object-oriented, event-driven programming techniques with emphasis on creating client applications. Builds on concepts learned in Java Concepts I.

Prerequisite(s): CSD 224  
Lab Fee: \$20

**CSD 270 Creating and Publishing Web Sites (4)**

Creating and editing web pages using a collection of different technologies. Standard programming language concepts and actual publishing of web pages. Creation of an e-commerce site

Prerequisite(s): CSD 140 or ITS 110, ITS 115 or ITS 107, CSD 105

Lab Fee: \$20

## (DAN) Dance

**DAN 100 Beginning Dance (1)**

Basic movement class for students with no previous dance experience. Placement exercises, movement combinations to improve flexibility and movements common to ballet and modern dance

Prerequisite(s): None

**DAN 111 Ballet I (3)**

Basic fundamentals and theory of classical ballet for beginning students. Includes barre work, center combinations and traveling sequences.

Prerequisite(s): None

**DAN 112 Ballet II (3)**

Ability to apply concepts and refine techniques learned in Ballet I. More advanced ballet techniques and concepts. Knowledge of 20th century ballet. Includes barre work, center combinations and traveling sequences.

Prerequisite(s): DAN 111

**DAN 113 Advanced Intermediate Ballet (3)**

Continuation of ballet fundamentals from Ballet I and Ballet II. Increased awareness of the relationship between movement and music. Includes barre work, center floor work and traveling sequences in each class

Prerequisite(s): DAN 111, DAN 112

**DAN 120 Modern Dance I (3)**

Fundamental movement principles demonstrating body awareness and alignment. Includes barre work, center floor work and locomotor patterns of movement using primarily modern dance technique. Awareness of the origins of modern dance.

Prerequisite(s): None

**DAN 130 Jazz Dance I (3)**

Basic fundamentals of jazz technique. Warm-up, simple jazz style exercises, isolations, floor movements, movement dynamics, basic dance fundamentals and vocabulary in the jazz idiom.

Prerequisite(s): None

**DAN 131 Jazz Dance II (3)**

Intermediate level of jazz dance techniques. Includes combinations, isolations, jumps, leaps and turns. Work on styles, speed and balance.

Prerequisite(s): DAN 130

**DAN 132 Jazz Dance III (3)**

Advanced level jazz technique. Advanced movement sequences. Continued study of jazz artists and choreography.

Prerequisite(s): DAN 131

**DAN 135 Tap Dance I (3)**

Basic fundamentals of tap technique. Basic steps, rhythm and combinations.

Prerequisite(s): None

**DAN 136 Tap Dance II (3)**

Continued fundamentals of the tap technique and vocabulary. Further work in basic steps, rhythms and combinations.

Prerequisite(s): DAN 135

**DAN 137 Tap Dance III (3)**

Advanced fundamentals of tap technique, including steps, rhythms and combinations.

Prerequisite(s): DAN 136

**DAN 150 Composition I (2)**

Basic choreographic factors using a single dancer. Study of historical styles and movement qualities.

Prerequisite(s): DAN 112

Lab Fee: \$50

**DAN 160 Dance History (3)**

Survey the major aspects of Western theatrical dance from sixteenth century through the twentieth century.

Prerequisite(s): None

**DAN 215 Pointe Technique I (2)**

Application of advanced ballet technique en pointe.

Prerequisite(s): None

## (DFT) Drafting

**DFT 101 Drafting I (3)**

Instruments and their uses, lettering, dimensioning, geometrical construction, sketching and orthographic drawing.

Prerequisite(s): CPE 061

Lab Fee: \$15

**DFT 102 Drafting II (3)**

Auxiliary views, sections, fasteners, welding symbols, riveting, developed views, pictorial drawings including isometric and perspective views, and fundamentals of design. All work drawn and dimensioned in accordance with ASME Y 14.100.

Prerequisite(s): DFT 101 or 2 years high school drafting

Lab Fee: \$15

**DFT 111 Architecture I (4)**

Introduction to architectural design and drafting. Research, preliminary design, formal presentation drawings, model building and design projects.

Prerequisite(s): DFT 211

Lab Fee: \$15

**DFT 112 Architecture II (4)**

Continuation of Architecture I. Use of a CAD system for production of working drawings, site plans, floor plans, elevations, sections and details.

Prerequisite(s): DFT 211

Lab Fee: \$15

**DFT 203 Technical Publication (4)**

Graphic communication with computer methods of drawing construction. Isometric, one point and two point perspective techniques used to construct part, exploded and sectioned assembly drawings. Drawings merged into a desktop publishing program for the addition of notes, assembly/repair instructions and specifications for the preparation of assembly and repair manuals.

Prerequisite(s): DFT 214, ENG 223

Lab Fee: \$15

**DFT 211 Computer-Aided Design I (4)**

Microcomputer system with Windows and AutoCAD software to construct two-dimensional mechanical drawings. Use of Windows and AutoCAD commands to produce drawings and fully dimension them according to ANSI standards. Drawings plotted fullsize and at scale as required.

Prerequisite(s): DFT 101 or two years h.s. drafting, ENT 121, or INT 105

Lab Fee: \$15

**DFT 212 Computer- Aided Design II (4)**

Continuing the use of the Windows version of AutoCAD software with microcomputer systems as applied to libraries, three-dimensional wire frame drawings and custom menus.

Prerequisite(s): DFT 211, DFT 102

Lab Fee: \$15

**DFT 214 Solid Modeling (4)**

Two-dimensional drafting and three dimensional solid model assemblies. Generating 2D and 3D elements, integrating 2D/3D elements, creating orthographic views from solid models and parametric modeling. Inventor used.

Prerequisite(s): DFT 211

Lab Fee: \$15

**DFT 215 Advanced Solid Modeling (3)**

Use of Windows version of AutoCAD software with microcomputer systems to write programs to automate the drafting and design process. Increasing productivity using programs to eliminate excessive numbers of drafting steps, make global drawing changes and simplify drafting of similar parts. Inventor used.

Prerequisite(s): DFT 214

Lab Fee: \$15

## (EBE) Experienced Based Education

**EBE 100 Employability Skills (2)**

Life, career and educational goals; resume and cover letter; research organization; interviewing skills, discussion of professional image; follow-up letter.

Prerequisite(s): CPE 061

Lab Fee: \$5

**EBE 110 Prior Learning Portfolio Development (3)**

The development of a portfolio to be assessed for credit for prior learning experiences. Topics include an overview of experiential learning, development of a chronological record, writing a goals paper, writing learning statements, documentation of learning experiences and development of a portfolio.

Prerequisite(s): This course is required if seeking more than 4 hours of experiential credit. Approval of Coordinator of Prior Learning Portfolio Program

**EBE 282 Co-Op Education I (2)**

Relating academic studies to the world of work, familiarity with a particular career, application of the principles and theories learned in classroom experiences, establishing learning outcomes and preparing related reports. Workplace learning of a minimum of 200 documented hours.

Prerequisite(s): EBE 100 and approved co-op placement

**EBE 283 Co-Op Education I (3)**

Relating academic studies to the world of work, familiarity with a particular career, application of the principles and theories learned in classroom experiences, establishing learning outcomes and preparing related reports. Workplace learning of a minimum of 300 documented hours.

Prerequisite(s): EBE 100 and approved co-op placement

**EBE 284 Co-Op Education I (4)**

Relating academic studies to the world of work, familiarity with a particular career, application of the principles and theories learned in classroom experiences, establishing learning outcomes and preparing related reports. Workplace learning of a minimum of 400 documented hours.

Prerequisite(s): EBE 100 and approved co-op placement

**EBE 292 Co-Op Education II (2)**

Continuation of valuable work experience. In addition to requirements of EBE 282, a special project is required based on the technology. Workplace learning of a minimum of 200 documented hours.

Prerequisite(s): EBE 282 or EBE 283 or EBE 284; and approved co-op placement

**EBE 293 Co-Op Education II (3)**

Continuation of valuable work experience. In addition to requirements of EBE 283, a special project is required based on the technology. Workplace learning of a minimum of 300 documented hours.

Prerequisite(s): EBE 282 or EBE 283 or EBE 284; and approved co-op placement

### **EBE 294 Co-Op Education II (4)**

Continuation of valuable work experience. In addition to requirements of EBE284, a special project is required based on the technology. Workplace learning of a minimum of 400 documented hours.

Prerequisite(s): EBE 282 or EBE 283 or EBE 284; and approved co-op placement

## **(ECE) Early Childhood Education**

### **ECE 101 Professional Development for Educators (1)**

Explore professional development options. Examine own potential learning style and study needs. Criteria for performance-based assessment for beginning teachers. (PRAXIS)

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): ECE 102

Lab Fee: \$10

### **ECE 102 Introduction to Early Childhood Education (4)**

An introduction to the historical development of early childhood education, types of programs, the physical environment, educational theory and the development of the child.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): ECE 101

Lab Fee: \$30

Student Liability Insurance: \$20

### **ECE 108 Observing and Assessing Young Children (4)**

Observing, recording, assessing, and interpreting behaviors of young children with emphasis on a variety of assessment tools and appropriate methodologies for collecting data for decision-making.

Prerequisite(s): CPE 061 or appropriate COMPASS score, ECE 102, ECE 101

Lab Fee: \$25

### **ECE 110 Infant/Toddler Education (3)**

Infant and toddler developmental milestones, appropriate environment and practices for stimulation and learning, educational theory and recent brain research concerning the first three years of life, health and safety aspects of group care for infants and toddlers.

Prerequisite(s): ECE 102, CPE 061 or appropriate Compass score

Lab Fee: \$25

### **ECE 114 Art, Music and the Child (3)**

Creativity of the child in art, music and movement. Resources for developing and implementing curriculum.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$35

### **ECE 115 Resources in Early Childhood Education (2)**

Making teaching materials and audio-visuals. Early childhood technology and use in the classroom. Making free or inexpensive materials. Examination of cost, storage and use of teaching aids. Exploration of community resources, professional organizations and parent communication.

Prerequisite(s): ECE 102, CPE 061 or appropriate COMPASS score

Lab Fee: \$25

### **ECE 120 Language Development and the Child (3)**

Communication of the child, developmental stages, language disabilities, language screening, curriculum development for the typical/atypical child and literature selection/evaluation for children from birth to 8 years of age.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): ECE 102 or Instructor permission

Lab Fee: \$25

### **ECE 210 Children's Literature (3)**

Comprehensive study of children's literature and how to use it effectively with young children from birth to age eight based on NAEYC's developmentally appropriate practice of literacy experiences. Designed to expose students to many titles of award winning children's literature and teach basic book handling skills.

Prerequisite(s): ECE 102 or Instructor permission

Lab Fee: \$25

### **ECE 211 Sensory Motor Skills (3)**

Motor development of the young child with emphasis on perceptual motor abilities, physical abilities, theory, activities enhancing movement in the classroom and physical education as a part of the curriculum for the pre-kindergarten/school-age child.

Prerequisite(s): ECE 102, CPE 061 or appropriate Compass score

Lab Fee: \$25

### **ECE 213 Health, Safety and Nutrition (3)**

Role of the teacher in preventing accidents; providing and maintaining a safe, healthy environment; childhood diseases, nutrition, curriculum and parent communication.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$25

### **ECE 215 Math /Science Activities (3)**

Math and science curriculum activities, observations, providing laboratory activities to stimulate basic math and science skills.

Prerequisite(s): ECE 102, CPE 061 or appropriate Compass score

Lab Fee: \$25

### **ECE 220 Early Literacy - A: Literacy-Rich Environments, Play & Language (3)**

Discover research-based literacy principles of phonemic awareness. Prepare literacy rich environments for children 0-8 years. Design and implement literature-based lessons that enhance literacy outcomes of young children.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): ECE 102

Lab Fee: \$25



**ECE 221 Early Literacy - B: Reading, Writing, & Phonics (3)**

Discover research-based literacy principles of reading, writing and phonics. Instructional strategies for children 0-8 years. Design and implement literature-based lessons that enhance literacy outcomes of young children.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): ECE 102

Lab Fee: \$25

**ECE 222 Early Literacy - C: Literacy Curriculum & Assessment (3)**

Discover research-based literacy principles of integrated curriculum models and assessment. Strategies for children 0-8 years. Design and implement literature-based lessons that enhance literacy outcomes of young children.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): ECE 102

Lab Fee: \$25

**ECE 223 Curriculum and Instruction in Early Childhood Education (3)**

Planning and implementing curriculum with emphasis on philosophy, goals, objectives, themes, lesson planning, screening and evaluation, classroom management and teaching techniques.

Prerequisite(s): ECE 102, PSY 221 or Instructor permission

Lab Fee: \$25

**ECE 224 School-Age Curriculum (3)**

Planning and implementing school-age curriculum for elementary school children who may attend the child care center before-school and after-school and summer program.

Prerequisite(s): ECE 102, PSY 221

Lab Fee: \$25

**ECE 225 Professional Legal Ethical Issues (2)**

Issues, educational programs concerning the child, parent, teacher, administrator, including legal aspects, ethics, and the future of early childhood education.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$25

**ECE 230 Organizational Management (3)**

Guidelines for financing and budgeting, board members, community assessment needs, facility equipment, staffing, scheduling, health and safety, management techniques, Ohio licensing regulations, enrollment management and other skills necessary to manage a quality early childhood education program.

Prerequisite(s): ECE 102

Corequisite(s): ECE 225

Lab Fee: \$25

**ECE 250 Positive Guidance in Early Childhood (3)**

An approach to discipline that is positive, preventive and developmentally appropriate for the early childhood age group.

Prerequisite(s): ECE 102

Lab Fee: \$25

**ECE 271 ECE Practicum I (2)**

Supervised experiences and observation in an approved child care center/Early Childhood Education program, assisting with appropriate activities with individual children and in small groups, becoming aware of routines and implementing theory in the classroom.

Prerequisite(s): ECE 213, ECE 223

Corequisite(s): ECE 291

Lab Fee: \$25

Student Liability Insurance: \$20

**ECE 272 ECE Practicum II (2)**

Supervised experiences in approved child care centers/Early Childhood Education program; knowledge, skills, attitudes, values of child development, education of the young child; assessing learning needs; taking the role of lead teacher while under the guidance of the cooperating teacher and the ECE faculty member; developing and evaluating age appropriate and developmentally appropriate curriculum; creating an environment that promotes discovery and self-esteem of the child; classroom management and communication skills.

Prerequisite(s): ECE 271

Corequisite(s): ECE 292

Lab Fee: \$25

**ECE 275 Leadership and Mentoring in Early Childhood Programs (2)**

Leadership and mentoring of pre- and in-service teachers using principles of adult development, developmentally appropriate practice, and effective communication.

Prerequisite(s): ECE 102, CPE 061 or appropriate Compass score

Lab Fee: \$25

**ECE 283 Child Care Practicum- Administration (2)**

Job shadowing a child care administrator in a licensed child care center/Early Childhood Education program. Observing and implementing administrative duties including: bookkeeping procedures, interviewing parents, supplies and inventory, curriculum, staffing patterns, and other duties performed by the administrator while supervising the day-to-day operations of a child care center.

Prerequisite(s): ECE 271, ECE 291, Instructor permission required

Corequisite(s): ECE 225, ECE 230, ECE 293

Lab Fee: \$25

Student Liability Insurance: \$20

**ECE 291 Child Care Seminar I (2)**

Analysis of experiences gained in an approved child care center/Early Childhood Education program, reviewing theory, teaching skills, team teaching, classroom management, lesson planning and evaluation.

Prerequisite(s): PSY 221, instructor permission required

Corequisite(s): ECE 271

Lab Fee: \$25

### **ECE 292 Child Care Seminar II (2)**

Analysis of experiences gained while taking the lead teacher's role in a licensed child care center/early childhood education program, the typical/atypical child, teaching techniques, behavior management, lesson planning, implementation followed by evaluation, parent communication and staff relationships in the workplace.

Prerequisite(s): ECE 271, ECE 291, instructor permission required

Corequisite(s): ECE 272

Lab Fee: \$25

### **ECE 293 Child Care Seminar- Administration (2)**

Review experiences gained while job shadowing a child care administrator in a licensed child care center/Early Childhood Education program, review and complete exercises assigned from textbook.

Prerequisite(s): ECE 275, ECE 271, ECE 291, Instructor permission required

Corequisite(s): ECE 225, ECE 230, ECE 283

Lab Fee: \$25

## **(ECO) Economics**

### **ECO 110 General Economics (3)**

Social/political analysis of contemporary economic issues, including population, inflation, unemployment, energy, and other policy issues. (Serves as General Education elective for students whose program does not require ECO 221 and ECO 222.)

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

### **ECO 221 Principles of Macroeconomics (3)**

Fundamentals of economics from a macro perspective including gross domestic product (GDP), monetary and fiscal policies, trends and cycles.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112 or ENG 135

### **ECO 222 Principles of Microeconomics (3)**

Fundamentals of economics from a micro perspective including principles of consumer behavior, supply and demand, price and wage determination, competition and resource allocations within individual markets.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112 or ENG 135

## **(EDU) Education**

### **EDU 110 Introduction to Education (5)**

Overview of the foundations of education in the United States. Interdisciplinary attempt (historical, political, economic, legal, social, philosophical, and curricular foundations) to provide pre-service teachers with global understanding of the teaching profession. Issues and controversies confronting American education today.

Prerequisite(s): CPE 061 or appropriate COMPASS score

### **EDU 216 Technology for Educators (4)**

Identify, locate, evaluate, design, prepare, and use educational technology. Develop classroom communication abilities through lectures, discussions, modeling, laboratory experiences and completion of a comprehensive project.

Prerequisite(s): ITS 103

### **EDU 217 Individuals with Exceptionalities (4)**

Survey course covering identification, developmental characteristics and intervention strategies for exceptional children and youth across education and community settings

Prerequisite(s): ECE 102 or EDU 110 or Instructor permission

## **(EEP) Early Elementary Paraprofessional**

### **EEP 122 Diversity in Education (3)**

Components of individual and group motivation and behavior. Differences in approaches to learning. Learning environments that encourage positive social interaction, active engagement and self-motivation. Instructional methods that are equitable and adaptable to diverse learners.

Prerequisite(s): ECE 102, ECE 101, CPE 061 or appropriate Compass score

Lab Fee: \$25

### **EEP 200 Educational Teaming: Working with Parents (3)**

Effects of culture, disability, socioeconomic status on collaboration and interaction with families. Effect of family environment on the learner. Strategies to promote effective collaboration with emphasis on listening, communication, confidentiality, problem solving, stress management, ethics and role as a team member. Field observation/participation required.

Prerequisite(s): CPE 061 or appropriate Compass score, ECE 102, ECE 101 or instructor permission

Lab Fee: \$25

### **EEP 228 Tutoring and Small Group Instruction (3)**

Learning approaches, teaching methods and materials used in tutoring and small group instruction. Creation of tutoring plans and small reading group plans using educational standards.

Prerequisite(s): EEP 122, ECE 223, ECE 250

Lab Fee: \$25

# **(EMS) Emergency Medical Service**

## **EMS 100 EMT-Basic Theory and Practice (8)**

Meets current standards of National Curriculum of EMT-Basic. Includes recognizing nature and seriousness of patient's condition/extent of injuries, administering appropriate emergency medical care, developing self confidence, communication skills and accurate record keeping. Successful students will be eligible to sit for Ohio's EMT-B (Basic) certification testing.

Prerequisite(s): CPE 061 or equivalent COMPASS Score, Current Basic Life Support for Health Care Providers Certification or may take EMS 171 concurrently, Instructor Permission

Corequisite(s): Criminal background check

Lab Fee: \$25

Student Liability Insurance: \$62

## **EMS 107 EMT Intermediate Theory/Practice I (4)**

First of two courses to meet current standards of State of Ohio Intermediate curriculum. Recognizing nature and seriousness of patient's condition and/or extent of injuries. Emphasis on basic anatomy and physiology, basic principles of pharmacology, venous access/medication administration, airway management and ventilation, patient assessment, clinical decision making, communication and documentation. Laboratory.

Prerequisite(s): CPE 062, CPE 091 or equivalent COMPASS scores, Ohio EMT Basic certification, Instructor Permission

Lab Fee: \$45

## **EMS 108 EMT Intermediate Theory/Practice II (3)**

Second of two courses to meet current standards of State of Ohio Intermediate curriculum. Recognizing nature and seriousness of patient's condition and/or extent of injuries. Emphasis on trauma, medical emergencies, special considerations and assessment based management. Laboratory.

Prerequisite(s): EMS 107

Corequisite(s): EMS 113

Lab Fee: \$20

## **EMS 110 Health and Health Emergencies (3)**

Consideration of selected health conditions and issues; recognition of health emergencies; demonstration of assistive measures.

Prerequisite(s): None

Lab Fee: \$20

## **EMS 112 Paramedic Hospital Practice I (1)**

Beginning of the clinical practice in the hospital setting observing and practicing skills evaluated in the college laboratory. Includes emergency department, IV therapy team, respiratory therapy, beginning cardiology and intubation in the operating room.

Prerequisite(s): CPE 062, CPE 091 or equivalent COMPASS scores, MST 105, BIO 105, Ohio EMT Basic Certification, Instructor Permission

Corequisite(s): EMS 131, EMS 132, EMS 118

Student Liability Insurance: \$62

## **EMS 113 EMT Intermediate Hospital Field Practice (1)**

Incorporates clinical practice in the pre-hospital and hospital ALS settings. Observing and practicing EMT Intermediate skills. Includes emergency department, IV therapy team, respiratory therapy, pediatrics and intubation in the operating room.

Prerequisite(s): EMS 107

Corequisite(s): EMS 108

Student Liability Insurance: \$62

## **EMS 114 Paramedic Hospital Practice II (2)**

Intermediate phase of the clinical practice in the hospital setting observing and practicing skills evaluated in the college laboratory. Includes emergency department, IV therapy team, respiratory therapy, pediatrics and intubation in the operating room. Integrates cardiac skills, advanced cardiac life support, and management of medical and behavioral emergencies.

Prerequisite(s): CPE 062, CPE 091 or equivalent Compass scores EMS 131, EMS 132, EMS 112, EMS 118 or current OH EMT Intermediate certification, MST 105 and BIO 105, Instructor permission

Corequisite(s): EMS 133, EMS 134, EMS 120

## **EMS 116 Paramedic Hospital Practice III (2)**

Advanced phase of the clinical practice in the hospital setting observing and practicing skills evaluated in the college laboratory. Includes emergency department, IV therapy team, respiratory therapy, pediatrics and intubation in the operating room. Integrates cardiac skills, advanced cardiac life support, prehospital trauma skills, assessment and management of medical emergencies and behavioral emergencies. Rotating through more specialized facilities completing hospital clinical requirements.

Prerequisite(s): EMS 133, EMS 134, EMS 114, EMS 120

Corequisite(s): EMS 135, EMS 136, EMS 122

## **EMS 118 Paramedic Field Practice I (1)**

Beginning level of pre-hospital experience with a paramedic team, observing daily responsibilities of the paramedic, opportunity to go on EMS calls, progressing from observation to participant role with the advanced life-support team.

Prerequisite(s): CPE 062, CPE 091 or equivalent Compass Scores, Certification as Ohio EMT Basic, MST 105, BIO 105, Instructor Permission

Corequisite(s): EMS 131, EMS 132, EMS 112

## **EMS 120 Paramedic Field Practice II (1)**

Continuation of pre-hospital experience with a paramedic team, observing the daily responsibilities of the paramedic, opportunity to go on EMS calls, progressing from an observation role to a participant role with the Advanced Life Support team.

Prerequisite(s): CPE 062, CPE 091 or equivalent Compass scores, EMS 131, EMS 132, EMS 112, EMS 118 or Current EMT -Intermediate Certification, MST 105, BIO 105, Instructor Permission

Corequisite(s): EMS 133, EMS 134, EMS 114

**EMS 122 Paramedic Field Practice III (1)**

Continuation of prehospital experience with a paramedic team, observing the daily responsibilities of the paramedic, giving the student the opportunity to go on EMS calls progressing from an observation role to a participant/leadership role with the Advanced Life Support team.

Prerequisite(s): EMS 133, EMS 134, EMS 114, EMS 120

Corequisite(s): EMS 135, EMS 136, EMS 116

**EMS 131 Paramedic Theory I (6)**

Introduction to emergency medical services advanced life support following EMT Paramedic National Standard Curriculum. Prehospital environment, overview of roles and responsibilities, EMS systems, medical ethical/legal aspects, therapeutic and professional communications, stress management in emergency services, advanced patient assessment, advanced airway management, IV therapy, introduction to respiratory and cardiac emergencies, emergency pharmacology and medication administration.

Prerequisite(s): CPE 062, CPE 091 or equivalent Compass scores, Ohio EMT Basic Certification, MST 105, BIO 105, Instructor Permission

Corequisite(s): EMS 112, EMS 118, EMS 132

**EMS 132 Paramedic Practical Skills Lab I (1)**

Practical skills lab to support course outcomes and learning objectives of EMS 131.

Prerequisite(s): CPE 062, CPE 091 or equivalent Compass scores, Ohio EMT Basic certification, MST 105, BIO 105, Instructor Permission

Corequisite(s): EMS 131, EMS 112, EMS 118

Lab Fee: \$75

**EMS 133 Paramedic Theory II (6)**

Apply concepts from Paramedic Theory/Practice I. National Standard Curriculum treatment plans for cardiovascular, neurologic, endocrine, gastroenterologic, renal, urologic, gynecologic, obstetric, and specific neonatal, pediatric and geriatric disorders, allergies and anaphylaxis, toxic exposure, infectious and communicable diseases, environmentally induced emergencies, behavioral emergencies.

Prerequisite(s): CPE 062, CPE 091 or equivalent Compass scores, EMS 131, EMS 132, EMS 112, EMS 118 or current EMT Intermediate certification, MST 105, BIO 105, Instructor Permission

Corequisite(s): EMS 114, EMS 120, EMS 134

**EMS 134 Paramedic Practical Skills Lab II (1)**

Practical skills lab to support course outcomes and learning objectives of EMS 133 and previously learned skills.

Prerequisite(s): CPE 062, CPE 091 or equivalent Compass scores, EMS 131, EMS 132, EMS 112, EMS 118 or Current EMT Intermediate certification, MST 105, BIO 105, Instructor Permission

Corequisite(s): EMS 133, EMS 114, EMS 120

Lab Fee: \$75

**EMS 135 Paramedic Theory III (6)**

Concepts from Paramedic Theory/Practice I and II. National Standard Curriculum treatment plan for trauma, acute deterioration of chronic illness, patients with special challenges and victims of abuse or assault. Management of emergency scene. Emphasizes critical thinking and decision making.

Prerequisite(s): EMS 133, EMS 134, EMS 114, EMS 120

Corequisite(s): EMS 136, EMS 116, EMS 122

**EMS 136 Paramedic Practical Skills Lab III (1)**

Practical skills lab to support course outcomes and learning objectives of EMS 135 and previously learned skills.

Prerequisite(s): EMS 133, EMS 134, EMS 114, EMS 120

Corequisite(s): EMS 135, EMS 116, EMS 122

Lab Fee: \$75

**EMS 171 Basic Life Support: CPR (1)**

Introduction to respiratory and circulatory emergency in infants, children, and adults. Instruction and treatment methods in community and professional cardiopulmonary resuscitation in accordance with the American Heart Association guidelines.

Prerequisite(s): None

Lab Fee: \$15

**EMS 220 EMS Pharmacology (3)**

General classification of drugs, indication, therapeutic effects, routes of administration, dosages, side effects and contraindications with an emphasis on medications used by and for ill or injured patients.

Prerequisite(s): Current EMT-P certification or Instructor permission

**EMS 225 Advanced Patient Assessment (4)**

Theoretical basis and methods of patient assessment for the health care professional stressing advanced techniques with an emphasis on practical application in a laboratory setting.

Prerequisite(s): EMT-P Certification or Instructor Permission

**EMS 240 Hazardous Material/Disaster Management (3)**

Applies EMS theories and practices in planning for disaster responses, Implementation of public education as it relates to the preplanning, reacting and follow up to man-made and natural disasters. Incorporates a working knowledge of incident command, major incident response, and disaster planning.

Prerequisite(s): EMS Certification and Hazardous Material Operation Certificate

**EMS 250 EMS Legal Insights (2)**

Legal aspects of basic and advanced pre-hospital care including criminal and civil law with an emphasis to expand knowledge base. Case studies are presented.

Prerequisite(s): Basic, Intermediate, or Paramedic Certification

### **EMS 288 Paramedic Theory/RNs (6)**

National Standard Paramedic Curriculum six divisions including pre-hospital environment, preparatory, trauma, burns, medical emergencies, OBG/GYN neonatal and behavioral emergencies for the registered nurse experience in the care of critically ill or injured patients. An emphasis is placed on practical knowledge in the college laboratory, hospital clinical setting and field internship. This course will substitute for EMS 131,132, 133,134,135, and 136. RNs are given credit for past experience for their nursing education and experience toward the U.S. Department of Transportation National Standard Paramedic Training curriculum.

Prerequisite(s): RN, ACLS, PHTLS, BTLS, PALS, min 2 yrs critical care, TNCC, Ohio EMT-Basic Certification

Lab Fee: \$65

Student Liability Insurance: \$62

## **(ENG) English**

### **ENG 111 English I (4)**

The process of writing a variety of academic and argumentative essays, language issues and library skills. Writing intensive.

Prerequisite(s): CPE 072 with grade of B or better or CPE 072 w/a grade of C or better, or appropriate Compass score

Corequisite(s): CPE 062 or appropriate Compass score

### **ENG 112 English II (4)**

Critical thinking, persuasive writing, research skills and literary analysis. Writing intensive.

Prerequisite(s): ENG 111 with a grade of C or better

### **ENG 130 Introduction to Literature (3)**

Critical readings, discussion and analysis of poetry, short story and drama.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

### **ENG 135 Business Report Writing (4)**

Business report writing including periodic, situational, informational, compliance and feasibility reports. Particular emphasis on critical thinking and writing a proposal, a work plan, a progress report and a long analytical research report. Oral presentation of research report. Will not necessarily transfer as the equivalent of ENG 112.

Prerequisite(s): ENG 111

### **ENG 221 Business Communication (3)**

Developing skill and sensitivity in preparing business documents, especially letters and memorandums, along with techniques for preparing effective resumes and application letters. Emphasis on the importance of factual accuracy, completeness, appropriate tone, clarity, proper grammar and writing style.

Prerequisite(s): ENG 111 or OAD105

### **ENG 223 Technical Report Writing (3)**

Technical communications encountered on the job, including letters of application/resumes, technical definitions, descriptions of mechanisms, instructions, proposals, progress reports, memos, oral presentations, complaint letters, claim letters, inquiry letters, E-mail, newsletters, web pages, Internet, as well as research on behavior, attitudes, values, and social system of another culture in terms of how these variables influence on-job communication preferences and expectations. This course will also incorporate APA (American Psychological Association) standard of writing for its papers.

Prerequisite(s): ENG 111 and ITS 12W or ITS 103 or basic word processing and keyboarding skills.

Corequisite(s): ENG 112

### **ENG 225 Creative Writing (3)**

A practical introduction to the three major literary genres: fiction, poetry and drama. Discussion topics include the basic elements of the three forms. Writing projects include a collection of poems, short & long fiction and a one-act script, screen play or play.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **ENG 230 Great Books: World Literature (3)**

Chronological selection of the major works and periods of world literature beginning with the ancients and progressing through modern times. Writing intensive.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **ENG 231 Great Books of World Literature: Honors (3)**

Honors-level approach to the study of a chronological selection of the major works and periods of world literature beginning with the ancients and progressing through modern times. Writing intensive. Emphasis on critical analysis of literature. Students may not take both ENG 230 and ENG 231 for credit toward graduation.

Prerequisite(s): ENG 112

### **ENG 241 Poetry (3)**

Both traditional and contemporary forms of world poetry, including rhyme and meter; blank verse; free verse; experimental forms; figurative language and allusion; explication and interpretation. Writing intensive.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **ENG 243 Fiction (3)**

Critical reading, discussion and analysis of short stories and novels.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **ENG 245 Drama (3)**

Study and analysis of plays from different historical periods.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**ENG 250 American Literature (3)**

Themes, ideas and periods in American literature from its beginning through modern times.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**ENG 261 British Literature to 1700 (3)**

Survey of the major works and periods of British literature from 700 to 1700.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**ENG 262 British Literature 1700-Present (3)**

Survey of the major works, themes, ideas and periods of British literature from 1700 to the present time.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

## (ENT) Engineering Technology

**ENT 100 World Class Manufacturing (3)**

World Class Manufacturing concepts and historical perspectives; simultaneous and concurrent engineering and Japanese innovations in manufacturing.

Prerequisite(s): INT 105 or DFT 101

**ENT 101 Engineering Methods (3)**

Engineering Technology as a profession. Dimensions, units, significant figures, simple trigonometry, simple logarithms and vectors. Use of scientific calculators.

Prerequisite(s): CPE 061

Corequisite(s): CPE102 or higher math placement

**ENT 109 Manufacturing Laboratory (2)**

Set-up and operation of lathes, mills, drills, band saws and grinders. Competency-based course requiring completion of several machining projects of increasing complexity. Safety, care and use of equipment. Use of machinists' references and inspection instruments.

Prerequisite(s): DFT 101, or INT 105, or 2 years of high school drafting

Corequisite(s): ENT 110

Lab Fee: \$40

**ENT 110 Manufacturing Processes (3)**

Detailed overview of manufacturing processes including machine tool operations, metal forming, welding processes and casting.

Prerequisite(s): DFT 101, or INT 105 or 2 years of high school drafting

Corequisite(s): ENT 109

**ENT 111 Engineering Materials (3)**

Structural and mechanical properties of ferrous (iron) and non-ferrous (aluminum, copper, nickel, etc.) materials and alloys. Non-metallic materials such as glass, ceramics, concrete, wood and electromagnetic and semi-conductor materials.

Prerequisite(s): CPE 061

Corequisite(s): CPE 102 or higher math placement

Lab Fee: \$10

**ENT 112 Metal Fabrication (4)**

Metal Fabrication with emphasis on angle, bar, plate & sheet stock. Pattern development and fabrication of projects using slip rolls, sheet metal brake, iron worker and angle rolls.

Prerequisite(s): DFT 101 or INT 105, or 2 years of high school drafting

Lab Fee: \$50

**ENT 121 Computer Basics for Applied Technology (3)**

Computer uses in technology. Computer applications of Window programs. The use of word processing, spreadsheet, and database software to prepare technical reports and manage information. Use the Internet and E-mail to obtain and share technical information.

Prerequisite(s): CPE 091, CPE 061

Lab Fee: \$15

**ENT 125 Computerized Maintenance Management Systems (2)**

Overview and introduction to computerized maintenance management systems (CMMS).

Prerequisite(s): ENT 121

**ENT 25 Circuits and Machines (4)**

Self-paced capstone class combining INT 150 and INT 155 courses. Direct and alternating current circuits, generators and motors; batteries; magnetism; electromagnetic induction; single and three-phase electric circuits; transformers and regulators utilizing laboratory experiments and demonstrations.

Prerequisite(s): CPE 061 or instructor permission

Lab Fee: \$15

**ENT 207 HVAC - Refrigeration (3)**

Basic refrigeration system operation. Air conditioning and heat-pump applications covering compressor, condenser, evaporator, metering devices and refrigerant troubleshooting systems.

Prerequisite(s): ENT 205

Lab Fee: \$15

**ENT 210 Engineering Statistics (3)**

Statistics with emphasis on engineering and technical applications, variability, the normal curve, hypothesis testing and internal estimates for the mean, components of variance, ANOVA and regression analysis and estimate point and confidence interval for parametric values.

Prerequisite(s): ENT 101, MTH 121

Lab Fee: \$10

**ENT 211 Statics (3)**

The force analysis of rigid bodies at rest: vectors, forces, moments, centroids, equilibrium conditions, analysis of trusses and frames, friction, moments of inertia and applications.

Prerequisite(s): ENT 101, MTH 121, MTH 140, PHY 111

**ENT 212 Finite Element Modeling (4)**

Modeling software applications of finite element thermal problems. Emphasis on analysis of forces acting on elastic bodies at rest, trusses and frames.

Prerequisite(s): DFT 214, ENT 111, ENT 121 and ENT 211

Lab Fee: \$20

**ENT 213 Strength of Materials (4)**

Equilibrium, stress and strain, review of centroids and moments of inertia, torsion, stresses and deflections in beams, combined loading, compression members and Mohr's Circle Method.

Prerequisite(s): ENT 211

**ENT 221 Computer Numerical Control (4)**

The theory and practice of NC and CNC machining with actual programming applications. Converting engineering drawings into programs using computer simulation to test programs and produce programmed parts.

Prerequisite(s): DFT 104, ENT 101

Corequisite(s): MAT 110 and MAT 111 or ENT 109 and ENT 110

Lab Fee: \$15

**ENT 222 Computer-Aided Manufacturing (4)**

Students learn industry-relevant skills in self-paced directed hands-on training format using industrial grade CIM software in real-time Ethernet, RS485 PC network, or Profibus mode, palletized conveyor system, robotic load/unload, CNC Milling operations, and numerous electro-pneumatic, mechanical, sensory, and bar-code reading devices. Safety is covered using lockout/tagout, safety switches and machinery guarding.

Prerequisite(s): ENT 221 or permission

Corequisite(s): INT 251

Lab Fee: \$20

**ENT 261 Engineering Mechanics I (5)**

Calculus-based transfer course. Vectorial treatment of force/moment systems, resultant, components, free body diagrams, equilibrium of particles, equilibrium of rigid bodies, analysis of trusses and structures, centroids, center of gravity, center of mass, friction and moment of inertia.

Prerequisite(s): MTH 240, PHY 250

Lab Fee: \$20

**ENT 262 Engineering Mechanics II (5)**

Calculus-based transfer course. Continuation of Engineering Mechanics I. Kinematics of particles and rigid bodies, acceleration, work-energy, impulse and momentum of particles and rigid body and mechanical vibration.

Prerequisite(s): ENT 261

Lab Fee: \$20

**(FRN) French****FRN 111 French I (4)**

Study of the French culture, vocabulary and structure of the French language; practice in conversation, reading and writing.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**FRN 112 French II (4)**

Study of the French culture, vocabulary and structure of the French language; practice in conversation, reading, and writing.

Prerequisite(s): FRN 111

**FRN 113 French III (4)**

Study of the French culture, vocabulary and structure of the French language; practice in conversation, reading, and writing.

Prerequisite(s): FRN 112

**(GEO) Geography****GEO 110 World Human Geography (3)**

Major cultural elements in human interaction with the environment, including a spatial analysis of population, landscape, language, religion, health care, ethnicity, rural and urban settlements, economic resources and development, food supply and environmental problems.

Prerequisite(s): CPE 061 and CPE 01 or appropriate Compass score

Corequisite(s): ENG 111

**GEO 220 World Regional Geography (3)**

Cultural, social, economic, and political developments from the geographic perspective of specific world regions, such as Africa, Asia, Latin America and the Middle East.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**(GER) German****GER 111 German I (4)**

Study of the vocabulary and structure of the German language; practice in conversation, reading and writing. German culture.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**(GLG) Geology****GLG 114 Ohio Field Geology (4)**

An introductory field geology course specializing in Ohio geology. Physical and historical geological formations, general exposure to the karst and glacial features, field mapping experience and the general importance of both environmental and economic geology.

Prerequisite(s): GLG 111 or GLG 113 or with special permission from the instructor

Lab Fee: \$25

**GLG 129 Survey of Earth Science (4)**

An introduction to the earth sciences. Concepts developed in Astronomy, Geology, Oceanography and Meteorology. Laboratory experience in rock and mineral identification, weather map reading and interpretation and problems in oceanography and astronomy. Does not contain lab and may not transfer.

Prerequisite(s): CPE 061 or appropriate Compass score

### **GLG 130 Earth and Space Science (5)**

An introduction to the earth sciences. Concepts developed in Astronomy, Geology, Oceanography and Meteorology. Laboratory experience in rock and mineral identification, weather map reading and interpretation and problems in oceanography and astronomy. This course contains a lab and is for transfer.

Prerequisite(s): CPE 061 or appropriate Compass score.

Lab Fee: \$40

### **GLG 131 Physical Geology (5)**

Study of the materials of which the world is composed. Examination of ongoing surface processes such as the movement of water and ices, formation of the land shape about us and the chemical and mechanical breakdown of earth materials. Processes leading to mountain building, alteration of deep and near surface rocks and earthquakes.

Prerequisite(s): CPE 061 or appropriate Compass score.

Lab Fee: \$40

### **GLG 132 Historical Geology (5)**

Study of earth in space; physical evolution of oceans, atmosphere, and continents; origins of life and evolution; physical and biological development of North American continent.

Prerequisite(s): CPE 061 or appropriate Compass score.

Lab Fee: \$40

### **GLG 133 Environmental Geology (5)**

The interaction of geological processes with the purposes posed by humans. Includes use and misuse of resources, hazardous environments, engineering difficulties, waste and effects on health.

Prerequisite(s): CPE 061 or appropriate Compass score.

Lab Fee: \$40

## **(GPH) Graphics**

### **GPH 100 Introduction to Graphic Design (4)**

Introduction to the Macintosh (Mac) as a layout tool. Introduction to QuarkXpress, Adobe Illustrator and Adobe Photoshop. Survey of graphic design as a profession.

Prerequisite(s): CPE 061

Lab Fee: \$20

### **GPH 105 Design Fundamentals (3)**

Study of five design principles: line, shape, value, texture and color and space and distance. Two-dimensional designs using media and tools/materials of the graphic designer. Study of elements and principles of design to create color action and color relatedness.

Prerequisite(s): CPE 061

Lab Fee: \$20

### **GPH 110 Digital Illustration (3)**

Use of Adobe Illustrator for technical illustration. Special emphasis placed on its use to generate professional quality technical drawings and information graphics.

Prerequisite(s): GPH 100, GPH 105, ART 111

Lab Fee: \$20

### **GPH 112 Digital Typography I (3)**

The study of type characteristics. Practical application of basic typographic principles within the design process. Use of QuarkXPress.

Prerequisite(s): GPH 100, GPH 105, ART 111

Lab Fee: \$20

### **GPH 114 Digital Typography II (3)**

Continued study of type characteristics. Emphasis on the practical application of basic and intermediate typographic principles within the design process.

Prerequisite(s): GPH 110, GPH 112, ART 112

Lab Fee: \$20

### **GPH 120 Logo, Symbol, Corporate ID (3)**

The application and study of type, logo/trademark and symbols for the creation of identification systems. Software: Adobe Illustrator

Prerequisite(s): GPH 114, GPH 201, ART 113

Lab Fee: \$20

### **GPH 201 Electronic Imagery I (3)**

Basics of image editing from scanning and retouching images to working with selections, layers, type and composite imagery. Adobe Photoshop utilized.

Prerequisite(s): GPH 110, GPH 112, ART 112

Lab Fee: \$20

### **GPH 202 Electronic Imagery II (3)**

Intermediate image editing from scanning and image retouching to working with selections, layers, type and composite imagery. Adobe Photoshop used.

Prerequisite(s): GPH 114, GPH 201, ART 113

Lab Fee: \$20

### **GPH 203 Electronic Imagery III (3)**

Advanced image editing from scanning and image retouching to working with selections, layers, type and composite imagery. Adobe Photoshop utilized.

Prerequisite(s): GPH 202

Lab Fee: \$20

### **GPH 205 Advertising Layout (3)**

Traditional and progressive advertising procedures used in a wide variety of media. Single ad designs using a variety of techniques. Creative techniques and strategies for effective advertising campaigns. Principles of design, typography and color. Problem-solving techniques. Attention to detail and meeting deadlines emphasized.

Prerequisite(s): GPH 203, GPH 212

Lab Fee: \$20

### **GPH 211 Computer Layout I (3)**

Introduction to layout and design using a variety of basic layout formats in black and white and/or color. Creative problem solving through use of thumbnails and computer refined comprehensives. Software: QuarkXPress and Adobe Photoshop.

Prerequisite(s): GPH 114, GPH 201

Lab Fee: \$20



### **GPH 212 Computer Layout II (3)**

The second of two courses designed to introduce layout and design using a variety of basic layout formats in black and white and/or color. Creative problem solving through the use of thumbnails and computer refined comprehensives. Software: QuarkXPress, Adobe Photoshop.  
Prerequisite(s): GPH 211  
Lab Fee: \$20

### **GPH 220 Illustration Techniques (3)**

Course in developing illustrations. Exploration of initial illustrative concepts using thumbnails. Refining ideas generated from roughs. Special emphasis placed on using Adobe Illustrator to produce professional quality drawings and information graphics.  
Prerequisite(s): ART 113  
Lab Fee: \$20

### **GPH 251 Professional Development I (3)**

Life, career and educational goals; resume and cover letter; research organization; interviewing skills, discussion of professional image; follow-up letter. Development of an individual portfolio from course work within the Graphic Design curriculum. Methods of self-promotion for the purpose of seeking employment and free-lance work included. Software: QuarkXPress, Adobe Photoshop and Adobe Illustrator.  
Prerequisite(s): GPH 211, CPE 091  
Corequisite(s): GPH 212  
Lab Fee: \$20

### **GPH 252 Professional Development II (3)**

Further refinement of individual portfolios from course work within the Graphic Design curriculum. Students are required to present portfolios to a panel of professional designers. Methods of self-promotion for the purpose of seeking employment (free-lance work, self promotional piece, digital portfolio, art show).  
Software: QuarkXPress, Adobe Photoshop, Adobe Illustrator.  
Prerequisite(s): GPH 251, CPE 101  
Corequisite(s): GPH 205  
Lab Fee: \$20

### **GPH 285 Graphic Design Internship (3)**

Relating academic studies to the world of work, familiarity with a particular career, application of the principles and theories learned in classroom experiences, establishing learning outcomes and preparing related reports.  
Prerequisite(s): GPH 251  
Lab Fee: \$20

## **(HON) Honors**

### **HON 291 Science and Religion (3)**

To explore the relation and interaction between science and theistic religion as disciplines and ways of knowing. Specific topics will include some of the following: ways of relating theistic and non theistic religions and science; the functions of language in religion and science; naturalism and supernaturalism; falsificationism; miracles, cosmology and creation; creation and evolution; science vs. pseudoscience; science and parapsychology and evidence for life after death.

Prerequisite(s): A minimum GPA of 3.25 and ENG 112

### **HON 292 Literature, Gender & Humanism (3)**

Interdisciplinary study of ethical issues as depicted in great works of literature. Focus is on literature as providing a rich context for humanistic approach to learning more about ourselves and how we ought to live.

Prerequisite(s): A minimum GPA of 3.25 and ENG 112

### **HON 294 Science, Humanity and Technology (3)**

This course develops the student's understanding of the nature of science and technology and its knowledge through the study of selected concepts, processes and skills in science and technology. The impact of scientific/technologic knowledge in society and the relationship between the nature of this knowledge and other ways of knowing is also examined.

Prerequisite(s): A minimum GPA of 3.25 and ENG 112

## **(HRM) Human Resource Management**

### **HRM 225 Human Resource Management (3)**

Examination of the human resource functions in the business organization. Job analysis, recruitment, hiring, training, performance appraisal and compensation. Psychological forces motivating workers; discipline and morale.

Prerequisite(s): MGT 106, MGT 112

### **HRM 230 Training and Development (3)**

Comprehensive study of training and organization development. Includes needs assessment, learning theories, training methods and evaluation. Application through training program creation and presentation.

Prerequisite(s): HRM 225 or instructor permission

### **HRM 235 Employment Law (3)**

Thorough examination of laws regulating employment relationship, discrimination, and employment environment. Includes affirmative action, race, gender, disability, national origin and age discrimination laws; labor law; Fair Labor Standards Act; and occupational health and safety.

Prerequisite(s): HRM 225 or instructor permission

### **HRM 240 Staffing (4)**

Study of staffing models, recruitment strategies, legal compliance, equal opportunity laws, assessment methods, selection process and staffing management. Concepts applied in mock interviews.

Prerequisite(s): HRM 225 or instructor permission

**HRM 245 Compensation and Benefits (3)**

Broad study of organizational compensation systems including legal issues, bases for pay, pay structures, executive compensation, required and discretionary benefits. Student work teams create compensation plans.  
Prerequisite(s): HRM 225 or instructor permission

**HRM 270 Human Resource Management Trends (2)**

In-depth review of current cases and trends in human resource management. Integrates concepts through discussion and presentation, as well as participation in a professional organization. Shadowing of a human resource professional.  
Prerequisite(s): HRM 225, HRM 230, HRM 235, HRM 240, HRM 245 or instructor permission

**(HST) History****HST 111 Western Civilization To the 14th Century (3)**

History of western society from earliest times to the 14th century. Social, political, economic and cultural aspects of the ancient and medieval eras.  
Prerequisite(s): CPE 061 or appropriate Compass score  
Corequisite(s): CPE 071

**HST 112 Western Civilization from the 14th through 18th Centuries (3)**

History of western society from the end of medieval times to the end of the French Revolutionary period. Renaissance, Reformation, the Enlightenment, the French Revolution and the Napoleonic era.  
Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score  
Corequisite(s): ENG 111

**HST 113 Western Civilization from 19th Century to the Present (3)**

History of western society from 1815 to the present. Social, political, economic and cultural aspects of the 19th-21st century. Nationalism, Revolution, the New Industrialism, Socialism, Colonialism, Imperialism and 20th-century developments.  
Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score  
Corequisite(s): ENG 111

**HST 114 Western Civilization To The 14th Century: Honors (3)**

Honors level approach to the history of western society from earliest times to the 14th century. Social, political, economic, and cultural aspects of the ancient and medieval eras. Writing intensive. Student may not receive credit toward graduation for both HST 114 and HST 111.  
Prerequisite(s): ENG 112

**HST 121 American History to 1810 (3)**

American history from before colonization to the Jeffersonian period including political, social, cultural and economic history.  
Prerequisite(s): CPE 061 or appropriate Compass score  
Corequisite(s): CPE 071

**HST 122 American History 1810-1900 (3)**

American history from the Jeffersonian period to the beginning of the 20th century including social, political and economic development in the United States.  
Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score  
Corequisite(s): ENG 111

**HST 123 American History 1900-Present (3)**

American history of the United States in the 20th and 21st century. Political, social, cultural and economic history, concluding with a review of current events.  
Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score  
Corequisite(s): ENG 111

**HST 220 Topics in African-American History and Culture (3)**

Examination of the people and events that have helped shape the story of blacks in America from 1619 to present. Organized around topics and themes, not necessarily taught in chronological order.  
Prerequisite(s): ENG 111 and college level American History course recommended  
Corequisite(s): ENG 112

**(HUM) Humanities****HUM 299 Capstone Seminar (3)**

Interdisciplinary approach to the study of the human condition: using readings, writing and critical thinking skills to address and evaluate readings from at least two disciplines including the natural sciences, sociology, psychology, literature, history, religion and philosophy; course content will vary.  
Prerequisite(s): A minimum of 60 credit hours earned including ENG 112

**(INT) Industrial Technology****INT 100 Mechanical Skills/Precision Measurement (3)**

Use of tools and precision measuring equipment to maintain, install and align mechanical equipment (bearings, couplings, flexible drives, gearing and gear reducers). Lubrication techniques, hand tools, drill press, shop press, dial indicators and gage blocks.  
Prerequisite(s): CPE 061 or instructor permission  
Lab Fee: \$15

**INT 101 Metrology I (2)**

The application and use of basic and precision measurement tools including scales, calipers, micrometers, dial indicators and others. The use of computer interfaces in metrology. An introduction to statistical process control including control charts, cause and effect diagrams and Pareto diagrams. Beginning concepts in geometric dimensioning and tolerancing.  
Prerequisite(s): CPE 061 or instructor permission  
Lab Fee: \$15

**INT 105 Blueprint Reading & Schematics (3)**

Instruction in part visualization from drawings, location of key features, drawing dimensioning methods, geometric dimensioning and tolerancing symbols, electrical, pneumatic and hydraulic schematic symbols and interpretation of drawing specifications.

Prerequisite(s): CPE 061 or instructor permission

Lab Fee: \$10

**INT 115 Industrial Calculations (3)**

Application of mathematical concepts to the design, and maintenance of products and processes. Basic concepts in measurement and geometry. Presenting and analyzing data using charts, graphs, algebraic equations, vector diagrams, statistical calculations and trigonometric relationships.

Prerequisite(s): CPE 091 or placement test

Lab Fee: \$5

**INT 120 Hydraulics/Pneumatics I (4)**

Components and principles utilized in basic industrial hydraulic and pneumatic circuits. Schematics for fluid systems, component operation, troubleshooting techniques and basic calculations for the design and troubleshooting of systems.

Prerequisite(s): CPE 061 or instructor permission

Lab Fee: \$15

**INT 125 Hydraulics/Pneumatics II (4)**

Application of hydraulic systems. Connection and operation of circuits utilizing cylinders, valves, hydraulic motors and other components. Control of advanced hydraulic circuits using electrical and pneumatic devices. Application of electronic sensors to fluid power systems. Principles of vacuum systems.

Prerequisite(s): INT 120

Lab Fee: \$15

**INT 126 Piping Systems (3)**

Identification, development, process selection, configuration, and assembly of fluid piping systems in agriculture, construction, and transportation. Pipe preparation and bending techniques. Run calculations, materials selection, fittings and valves.

Prerequisite(s): CPE 061

Lab Fee: \$25

**INT 140 Industrial Safety (2)**

An introduction to industrial regulatory safety terminology and requirements.

Prerequisite(s): CPE 061 or instructor permission

Lab Fee: \$5

**INT 150 Electrical Systems (4)**

Components and operation of common alternating and direct current circuits. Use of test equipment for electrical circuits. Calculations involved in troubleshooting circuits. Series and parallel circuits. Basic logic circuits, control circuits, and the use of circuits to control mechanical processes, electrical wiring techniques and system installation.

Prerequisite(s): CPE 061 or instructor permission

Lab Fee: \$15

**INT 155 Motors and Motor Controls (4)**

The various types of direct and alternating current motors including their performance characteristics and application. Basic motor control concepts and selection of motors for specific applications. Speed, torque and power and their effects on motor performance.

Prerequisite(s): INT 150, CPE 091 or higher math placement

Lab Fee: \$15

**INT 158 Electrical Distribution I (3)**

Construction, troubleshooting, maintenance, and repair of wiring for power distribution systems between the bus bar and the control panel. Includes wiring for a variety of industrial electrical distribution applications. Lockout/tagout procedures and safety-disconnect switches.

Prerequisite(s): CPE 061

Lab Fee: \$30

**INT 159 Electrical Distribution II (3)**

Construction, troubleshooting, maintenance, and repair of the wiring in electrical control panel systems. Wiring for a variety of industrial applications. Lockout/tag-out, emergency stop pushbuttons and safety disconnect switches.

Prerequisite(s): CPE 061

Lab Fee: \$30

**INT 170 Mechanical Maintenance (4)**

Operating principles, troubleshooting and maintenance of mechanical power transmission equipment. Lubrication, bearings, couplings, flexible drives, valves, centrifugal pumps, gearing, gear reducers, V-belts, brakes and clutch assemblies.

Prerequisite(s): CPE 061 or instructor permission

Lab Fee: \$15

**INT 175 Foundations of Digital Control (4)**

Introduction to semiconductors, analog and digital integrated circuits including operational amplifiers, power supplies, oscillators and multi-vibrators, logic gates, encoders, decoders, analog to digital and digital to analog converters.

Prerequisite(s): INT 150

**INT 200 Robotics (3)**

Programming a robot, industrial controller operation, and a wide variety of robotic applications. Assembly, material handling, machine tending, gluing and inspection. Programming robots to perform a range of serial and Ethernet 5- and 6-axis operations.

Prerequisite(s): ENT 121

Lab Fee: \$30

**INT 212 Electronic Systems (4)**

Survey of electronic components and systems-operation. Signatures, basic testing using HUNTRON 2000 Scope. Troubleshooting at the component level.

Prerequisite(s): INT 175 or High School Electronics

Lab Fee: \$15

**INT 215 Statistical Process Control (3)**

Philosophy, history, statistical basis of SPC and use of computers for QC. Quality improvement techniques for industry. Control chart development and utilization for both variables and attributes. Process capability and capability index. Introduction to acceptance sampling.

Prerequisite(s): INT 101

Lab Fee: \$10

**INT 225 Industrial Electronics (3)**

Fundamentals and specific applications of electronic components for control of industrial machines and processes. Input and output transducers. Feedback systems and servomechanisms. Closed loop control.

Prerequisite(s): INT 212

Lab Fee: \$15

**INT 226 Hydraulic Troubleshooting (3)**

Location, identification, and correction of various inserted faults in an industrial quality electro-hydraulic system. Troubleshooting faults in many mechanical, hydraulic and electrical components. Lockout/tag-out procedures, emergency stop pushbutton, safety switches and actuator guards.

Prerequisite(s): INT 125

Lab Fee: \$20

**INT 227 Pneumatic Troubleshooting (3)**

Location, identification, and correction of inserted faults in an industrial quality electro-pneumatic system, which includes fault isolation and troubleshooting to the component level. Lockout/ tag-out, emergency stop pushbuttons, safety disconnect switches and actuator guards.

Prerequisite(s): INT 120

Corequisite(s): INT 125

Lab Fee: \$20

**INT 228 Pump Systems (3)**

Design, operation, installation, maintenance, troubleshooting, performance analysis, and proper application selection for centrifugal, magnetic, gear, piston, peristaltic, turbine, and diaphragm-type pumps. Reading and analysis of test instrumentation including pump performance under various load conditions, inlet and outlet pressures, digital flow meter, motor speed, and torque readout.

Prerequisite(s): INT 170

Lab Fee: \$20

**INT 230 AC Electronic Motor Drives (3)**

Operation and troubleshooting of AC servomotor drives. Complete instrumentation to monitor motor performance under various load conditions, speed, and torque readouts.

Prerequisite(s): INT 155 or ENT 205

Lab Fee: \$20

**INT 231 DC Electronic Motor Drives (3)**

Operation and troubleshooting of DC servomotor drives used in industry. The Pulse Width Modulation (PWM) feature in addition to a full range of DC servomotor drives. Instrumentation to monitor motor performance under the various load conditions, speed, and torque readouts.

Prerequisite(s): INT 155 or ENT 205

Lab Fee: \$20

**INT 249 Programmable Logic Controllers (Siemens) (3)**

Programming, connecting, and testing Siemens PLC's for control of industrial/commercial processes. Programmable Logic Controllers (PLC's). Interfacing with sensors, using PLC's in a variety of process applications. Utilization of Amatrol 890-PEC-B trainer.

Prerequisite(s): INT 150 or ENT 205 or instructor permission

Lab Fee: \$10

**INT 251 Programmable Logic Controllers (Allen-Bradley) (4)**

Programming, connecting, and testing PLC's for control of industrial/commercial processes. Programmable Logic Controllers (PLC's). Interfacing with sensors, using PLC's in a variety of process applications. Introduction to the PLC controller of the CSCC CIM System. Utilization of Amatrol 890-PEC-B trainer in troubleshooting PLC's.

Prerequisite(s): INT 150 or ENT 205 or instructor permission

Lab Fee: \$10

**INT 252 Automated Systems (4)**

Fixed automation using transfer lines controlled by relay logic and flexible automation using PID Analog Controllers, robots, Computer Numerical Control (CNC) tools, conveyors, intro to Automatic Storage/Retrieval System and Automatic Guided Vehicles. Computer integration of mechanical components. Introduction & operation of CSCC CIM System.

Prerequisite(s): INT 251, INT 150 or ENT 205

Lab Fee: \$20

**INT 255 Electrical Troubleshooting (4)**

Maintenance and troubleshooting of motors, solenoids, electrical controls, electrical circuitry and sensors using common testing equipment. Problems at the component, machine, and inter-machine levels. Introduction & operation of the CSCC CIM System.

Prerequisite(s): INT 155 or ENT 205

Lab Fee: \$15

**INT 260 Electrical Distribution III (4)**

Transformers, AC power distribution, power factor correction, voltage regulation and DC power supplies. Circuit protection using circuit breakers, fuses and ground fault interrupters.

Prerequisite(s): INT 155 or ENT 205

Lab Fee: \$20

**INT 270 Industrial Machine Maintenance (4)**

Utilizing all skills acquired in previous DLL courses to troubleshoot and maintain capstone class machines and system levels. Manufacturer's documentation and maintenance logs. Introduction to planned and predictive maintenance. Troubleshooting charts and efficient sequence for failure analysis. Operation of the CSCC CIM System.

Prerequisite(s): INT 155, INT 170, INT 255 or instructor permission

Lab Fee: \$20

### **INT 271 Vibration Analysis (3)**

Analyze, troubleshoot, and correct sources of detrimental vibration in machinery. Use of sophisticated sensors for detecting the source and severity of vibration and the safety concerns in a variety of machine application components. Prerequisite(s): INT 170 or instructor permission  
Lab Fee: \$15

### **INT 272 Mechanical Systems (3)**

Advanced concepts of mechanical transmission systems used in industrial, agricultural, and mobile applications. Operation, installation, performance analysis, and design of basic mechanical transmission systems using chains, v-belts, spur gears, bearings, and couplings. Lockout/tag-out, safety disconnect switch, and rotating machine guards. Prerequisite(s): INT 170 or instructor permission  
Lab Fee: \$20

### **INT 280 Industrial Technology Projects (4)**

A capstone class in which students will apply the skills acquired in the DLL courses to design, fabricate, install, document and debug an assigned project of a scale and type normally done in-house by local plants engineering and maintenance personnel. Operation of the CSCC CIM System. Prerequisite(s): INT 255, ENG 223  
Lab Fee: \$20

## **(ITS) Information Technology Systems**

### **ITS 080 Computer FUNDamentals (1)**

Fundamental concepts of computers, operating systems, and network usage. Preparatory course for students with little or no computer background. Graded on an S or U (satisfactory or unsatisfactory) basis. Prerequisite(s): CPE 061

### **ITS 103 Information Technology Basics (3)**

Brief overview of Windows or current GUI, basic but essential word processing concepts, electronic mail, WWW research techniques, OhioLINK (Windows XP, Word 2007.) Students with little or no keyboarding experience should expect to take longer to complete assignments. Prerequisite(s): ITS 080 or placement score; CPE 061

### **ITS 107 HTML Fundamentals (3)**

Use HTML and XHTML to develop web sites without the aid of web page composition software. Prerequisite(s): Equivalent ITS 080 Skills; CPE 061

### **ITS 108 XML Web Services (3)**

Overview of the structure and programming techniques of XML. Role of XML in the Microsoft.NET vision. Distributed standards-based computing fundamentals. Prerequisite(s): ITS 107  
Lab Fee: \$15

### **ITS 115 HTML and XHTML (4)**

Use HTML and XHTML to develop web sites without the aid of web page composition software. Prerequisite(s): Equivalent ITS 080, skills; CPE 061

### **ITS 118 XML Web Services (4)**

Overview of the structure and programming techniques of XML. Prerequisite(s): ITS 115 or ITS 107

### **ITS 12A Windows Concepts (2)**

Familiarization with the mouse and a graphical operating environment. Topics include all major aspects of Microsoft Windows XP. Knowledge of a personal computer keyboard strongly recommended. Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

### **ITS 12D Beginning Database (1)**

Basic database manipulation (e.g. creating, updating, and generating reports) via packaged software (Access 2007). Keyboarding skill strongly recommended. (Students who have little or no keyboarding skills will likely take much longer in completing the assigned tasks.) Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

### **ITS 12K Keyboarding/Word Processing (2)**

Development of techniques for proper keyboarding skills. Creating and editing documents using packaged word processing software. Strongly recommended for students who have few or no keyboarding skills. Can be used as a substitute for ITS 12W. Prerequisite(s): Skills equivalent to ITS 080

### **ITS 12P Beginning Presentation Graphics (1)**

Techniques of visual presentation development via the use of a presentation software package (PowerPoint 2007). Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

### **ITS 12S Beginning Spreadsheet (1)**

Basic creation and manipulation of data within an electronic spreadsheet (Excel 2007), planning and creating workbooks, using formulas and functions, creating charts, and formatting spreadsheet objects. Students with minimal computer skills will take longer in completing the assigned tasks and may want to consider taking ITS 080, Computer Fundamentals. Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

### **ITS 12W Beginning Word Processing (1)**

Basic creation and editing of documents using packaged word processing software (Word 2007). Keyboarding skills strongly recommended. Students who have never worked on a keyboard and have little or no keyboarding skills will likely take much longer in completing the assigned tasks. ITS 12K, which teaches keyboarding skills and beginning word processing skills, may be substituted for ITS 12W. Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

### **ITS 14D Intermediate Database (2)**

Intermediate database manipulation techniques using packaged software (Access 2007). Arithmetical/statistical manipulations, labels, reports, indexing, searching, programming, etc. Prerequisite(s): ITS 12D or instructor permission

### **ITS 14S Intermediate Spreadsheet (2)**

Intermediate spreadsheet manipulation techniques using packaged software (Excel 2007). Managing files and memory, graphing, database functions, functions and formulas.

Prerequisite(s): ITS 12S or instructor permission

### **ITS 14W Intermediate Word Processing (2)**

Formatting issues, intermediate and advanced; automating procedures like mail-merge and macros; exchanging data between applications. (Word 2007)

Prerequisite(s): ITS 12W or ITS 102 or ITS 12K

### **ITS 230 Introduction to Web Design (3)**

Study of web page design. Basic HTML coding and use of Macromedia Dreamweaver with emphasis on aesthetics of web page design.

Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

Lab Fee: \$20

### **ITS 231 Web Page Multimedia (3)**

Enhance web pages with images and animation using Flash.

Prerequisite(s): ITS 230

Lab Fee: \$20

## **(LPN) Practical Nursing**

### **LPN 108 Basic Nutrition and Diet Therapy (2)**

An introduction to the basic principles of nutrition and dietary treatment of common disease conditions and health disorders. Course consists of a total of 20 lecture hours.

Prerequisite(s): MST 105, BIO 105, ENG 111, ITS 12W or Instructor Permission

Corequisite(s): LPN 125 or Instructor Permission

### **LPN 125 Introduction to Disease Processes (4)**

Basic principles of microbiology, signs and symptoms of common disease/conditions of each body system, diagnostic tests, treatment and principles of nursing care. Course consists of a total of 40 lecture hours.

Prerequisite(s): MST 105, BIO 105, ENG 111, ITS 12W, PSY 111, Instructor permission

Corequisite(s): NUR 114

### **LPN 130 Nursing Trends I (2)**

Ethical and legal dimensions of practical nursing practice. Historical perspectives on practical nurses and nursing organizations. Course consists of 20 lecture hours.

Prerequisite(s): ENG 111, ITS 12W, PSY 111, Instructor permission

### **LPN 146 Pharmacology for Practical Nurses (4)**

Basic, essential knowledge of pharmacology for the practical nurse. Major content areas include principles of pharmacology, functions, and therapeutic implications of the major drug classes including their prototype drugs, the individuality and variability of patients and the relationship between pharmacologic knowledge and nursing practice. Content includes IV antibiotic therapy and the practical nurses' role in delivery of them based on specific Ohio Board of Nursing laws and rules. Course consists of 40 hours of lecture.

Prerequisite(s): LPN 125, LPN 130, NUR 114

### **LPN 151 Pediatric Nursing (3.5)**

Family centered approach to meeting the needs of the pediatric client; application of the nursing process, role of the nurse in the care of the infant/child with common diseases/conditions. 30 hours of lecture. 15 hours of clinical.

Prerequisite(s): LPN 108, LPN 125, LPN 130, LPN 160, PSY 221 or PSY 223

Corequisite(s): LPN 146

### **LPN 160 Fundamentals of Nursing I (6)**

Role of the nurse in the maintenance and promotion of health, application of nursing, biological, and social sciences, basic assessment techniques, ethical/legal issues. College lab and health care facility settings. Course consists of 40 hours lecture, 20 hours college lab, and 40 hours clinical.

Prerequisite(s): MST 105, BIO 105, PSY 111, ENG 111, ITS 12W, MST 181 or equivalent, Instructor permission

Corequisite(s): LPN 108, LPN 125, NUR 114, LPN 130

Lab Fee: \$155

Student Liability Insurance: \$20

### **LPN 171 Fundamentals of Nursing II (6)**

Role of the practical nurse in the maintenance and promotion of health; application of medical and surgical aspesis and the use of the nursing process while delivering nursing care to adult clients. Didactic and laboratory content in IV therapy for the practical nurse based on specific Ohio Board of Nursing laws and rules. 20 lecture, 40 lab and 60 clinical hours.

Prerequisite(s): LPN 108, LPN 125, LPN 130, LPN 160, NUR 114,

Corequisite(s): LPN 146

Lab Fee: \$125

### **LPN 182 Women's Health and Obstetric Nursing (2.5)**

Holistic approach to women's health care and its relationship to the childbearing female. Female anatomy and physiology, male reproductive system, fetal growth and development, normal changes of pregnancy, labor & delivery, postpartum and care of the newborn with emphasis on preventing complications. Includes impact of childbirth and newborn on family unit and current trends in women's health. Course consists of 20 hours of lecture and 15 hours of clinical experience in a maternal/child healthcare setting.

Prerequisite(s): LPN 125, LPN 130, NUR 114, LPN 108

Corequisite(s): LPN 146, LPN 160

### **LPN 190 Medical-Surgical Nursing (14)**

Application of the nursing process while providing nursing care for adult clients with common medical conditions; study and care of the surgical patient from admission through discharge from the hospital; Capstone experience managing nursing care of groups of clients in long-term care setting; identifying career concerns and opportunities; comprehensive review and testing of all prior nursing courses. Course consists of 70 lecture and 210 clinical hours.

Prerequisite(s): LPN 146, LPN 151, LPN 171, LPN 182

Lab Fee: \$95

## **(LSC) Logistics**

### **LSC 120 Truck Driver Training 176 (9)**

Federal and state regulations, commercial drivers license (CDL) rules, hazardous materials, log books, National Safety Council, map reading, coupling and uncoupling, space and speed management, driving conditions, braking systems, maintenance and inspections, shifting, turning, communications, types of vehicles, loading and unloading. Minimum of 56 classroom hours/120 lab hours.

Prerequisite(s): (1) CDL permit with all required tests completed. (2) Valid Ohio drivers license. (3) DOT physical and drug screen. (4) Industry-standard motor vehicle record.

Lab Fee: \$3238

### **LSC 210 Purchasing & Supply Management (4)**

Management of purchasing and supply systems common to service, manufacturing, and government organizations. Survey of the interrelationship and interdependence of the purchasing function within supply chain management and other functional areas of business. Emphasis on purchasing policies, procedures and techniques in the procurement, acquisition and decision process utilized in the purchasing and acquisition functions.

Prerequisite(s): MGT 105; MGT 112

### **LSC 220 Logistics & Physical Distribution (4)**

Design and management of physical distribution and logistic systems. Interrelationship and interdependence within the functional areas of business. Transportation methods, techniques, physical and automated systems, infrastructure, interrelationships and requirements comprising physical distribution and logistics systems.

Prerequisite(s): MGT 112

Corequisite(s): MGT 266 or STT 264

### **LSC 272 Operations & Supply Chain Management (5)**

The design and management of production operations, including productivity, quality issues, strategy, capacity planning, location, layout, human resources, just-in-time systems, materials requirement planning and project management.

Prerequisite(s): MGT 112; MGT 266 or STT 264

### **LSC 275 Inventory & Materials Management (4)**

Principles of inventory and materials management systems, common methods of planning and controlling inventory in manufacturing, institutional, distribution, and retail environments. Interrelationship and interdependence of the inventory and materials function within supply chain management and other functional areas of business. Demand forecasting, independent demand inventory systems, inventory models, aggregate planning, priority and capacity management, capacity requirements planning, production activity control and Just-in-Time.

Prerequisite(s): MGT 112

## **(MAS) Medical Assisting**

### **MAS 101 Orientation to Medical Assisting (2)**

Introduction to medical assisting. Professionalism, history of medical assisting, certification, professional organizations and employment in the medical office.

Prerequisite(s): CPE 061, CPE 071, or appropriate scores on COMPASS exams

### **MAS 102 Medical Law and Ethics (2)**

Basic ethical and legal issues relevant to the medical office employee. Confidentiality, patient-physician contract, consents and current ethical issues.

Prerequisite(s): MAS 101, MST 101

Corequisite(s): MAS 103, MAS 104

### **MAS 103 Medical Administrative Office I (3)**

Front office administrative duties required of the medical assistant. Telephone and other electronic communication devices, appointment scheduling, the medical record, written communication, filing systems and basic office management.

Prerequisite(s): MAS 101, MST 105, ITS 12W

Corequisite(s): MAS 102, MAS 104, ITS 12S

Lab Fee: \$40

### **MAS 104 Exam Room Procedures I (4)**

Duties expected of a clinical medical assistant. Nutrition, infection control, medical and surgical asepsis, diagnostic imaging, and assisting with the adult, pediatric, and geriatric physical examination. Specialties: pediatrics, otolaryngology and ophthalmology.

Prerequisite(s): MAS 101, MST 105, BIO 105, MST 104

Corequisite(s): MAS, 102, MAS 103, PSY 111

Lab Fee: \$75

### **MAS 113 Medical Administrative Office II (3)**

Financial aspects of the office, ICD-9 and CPT coding, medical insurance, reimbursement procedures and managing patient accounts.

Prerequisite(s): MAS 103

Corequisite(s): MAS 114, MAS 115, MAS 116

Lab Fee: \$40

### **MAS 114 Exam Room Procedures II (4)**

Medication administration, principles of intravenous therapy, and medical office emergencies. Specialties: obstetrics and gynecology, cardiology, urology, pulmonary medicine, dermatology and gastroenterology

Prerequisite(s): MAS 104, CPE 101

Corequisite(s): MAS 113, MAS 115, MAS 116, MST 171

Lab Fee: \$75

### **MAS 115 Laboratory Procedures for the Medical Office (2)**

Diagnostic physician office laboratory procedures: collection and processing of specimens, laboratory safety, microbiology, urinalysis, hematology, serology and blood chemistry

Prerequisite(s): MAS 104

Corequisite(s): MAS 113, MAS 114, MAS 116

Lab Fee: \$75

**MAS 116 Pharmacology for the Medical Office (2)**

Principles of pharmacology for the medical assistant: sources of drugs, drug classifications, actions and interactions.

Prerequisite(s): MAS104, CPE 101

Corequisite(s): MAS 113, MAS 114, MAS 115

**MAS 117 Clinical Directed Practice (5)**

Integration of content and competencies covered in the Medical Assistant certificate program. One-hundred and sixty (160) of the hours must be completed in a family practice office. Remaining hours may be completed in a specialty area.

Prerequisite(s): MAS 113, MAS 114, MAS 115, MAS 116, MLT 116, MLT 117, MST 171, ENG 111

Corequisite(s): MAS 118

Student Liability Insurance: \$20

**MAS 118 Clinical Perspectives Seminar (1)**

Forum for shared learning and problem solving of directed practice experiences. Resume preparation, interviewing skills and employment laws.

Prerequisite(s): MAS 113, MAS 114, MAS 115, MAS 116, MLT 116, MLT 117, MST 171, ENG 111

Corequisite(s): MAS 117

**MAS 210 Medical Assisting Exam Review (2)**

Preparation for the American Association of Medical Assistants (AAMA) national certification examination

Prerequisite(s): Successful completion of the medical assistant certificate or instructor approval.

**MAS 211 Advanced Clinical Skills (4)**

Advanced medical assistant practice according to student interest in specialty areas and instructor approval. Specialties: pediatrics, obstetrics, podiatry, chiropractic medicine and ophthalmology.

Prerequisite(s): MAS 114

**MAS 212 Leadership and Management in the Medical Office (3)**

Principles of leadership and management for supervisory personnel in the medical office. Managing medical office resources, leadership styles, developing office policy and procedure manuals and physician credentialing.

Prerequisite(s): CPE 062, CPE 071 or appropriate COMPASS scores

Corequisite(s): MAS 213

**MAS 213 Leadership and Management Directed Practice (1)**

Direct participation in a supervised leadership and management experience in a medical office.

Prerequisite(s): CPE 062, CPE 071 or appropriate scores on COMPASS exams

Corequisite(s): MAS 212

Student Liability Insurance: \$20

**MAS 214 Advanced Insurance and Billing Practices (4)**

Advanced skills necessary for managing and maintaining a physician's office billing department. Claim adjudication follow-up, integrating diagnostic and procedural coding into the insurance claim process, collections procedures, and specialized knowledge regarding private payers, government plans and worker's compensation

Prerequisite(s): MAS 113

**(MGT) Management****MGT 100 Personal Finance (3)**

A framework of personal money management concepts, including establishing values and goals, determining sources of income, managing income, preparing a budget, developing consumer buying ability, using credit, understanding savings and insurance and providing for adequate retirement and estate planning. Personal computer applications for recordkeeping and decision-making introduced. Not acceptable as an elective in management, logistics or marketing.

Prerequisite(s): None

**MGT 105 Contemporary American Business (3)**

A broad survey of the American business system encompassing social responsibilities of business, our legal environment and business ethics, government regulation and taxation, forms of business ownership, small business administration, business management, organized labor and other topics.

Prerequisite(s): CPE 061

**MGT 106 Organizational Behavior (4)**

An assessment of self, personality, self-concept, perception, and verbal and nonverbal communications skills. Includes organizational behavior concepts and practices. Discussion of diversity, job success and development of effective work relations. A view of workplace dynamics including conflict resolution, assertiveness, team problem solving and decision making.

Prerequisite(s): CPE 061

**MGT 112 Principles of Management (4)**

The four basic management functions: planning, organizing, leading, and controlling. Topics include ethics, decision making, planning, structure, power and authority, delegation, leadership and teamwork and motivational theories and productivity.

Prerequisite(s): CPE 061

**MGT 115 Customer Relations (3)**

Philosophy, purpose, techniques, and the principles of management of excellent customer service and relations. Communication skills. Integrated customer relations technologies. Customer related complaints. Problem-solving skills.

Prerequisite(s): CPE 061



**MGT 200 Introduction to Project Management (4)**

Develop business, interpersonal, and technical skills required to successfully manage business and system development projects. Covered topics include: project integration; scope, time, cost, quality, human resource, communications, risk and procurement management. Microsoft Project software.

Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

Lab Fee: \$15

**MGT 202 Quality Management (4)**

Customer satisfaction and quality management through employee involvement. Continuous process improvement, performance measures, Statistical Process Control (SPC), ISO9000, benchmarking and the use of various management tools used for managing quality.

Prerequisite(s): MGT 106, MGT 112

**MGT 211 CyberSecurity Management I (5)**

Introduction to cyber-security management topics. Discussion of legal, ethical, and professional issues in cyber-security. Overview of risk management planning, security technologies and security maintenance.

Prerequisite(s): ITS 103 or NTK 176

**MGT 212 CyberSecurity Management II (5)**

Advanced review of cybersecurity management topics. In-depth analysis of security scenarios via case studies. Hands-on exposure to cyber-security management and analysis software tools.

Prerequisite(s): MGT 211

**MGT 214 Small Business Theory and Practice (4)**

Small business and entrepreneurship. Decision for self-employment through small business opportunities; business planning, financing, marketing and management. Integration of functional business courses into a balanced overview of entrepreneurship. Application through group activities and projects.

Prerequisite(s): ACC 111, MGT 105, MGT 112

Corequisite(s): MGT 270

**MGT 250 Leadership in Organizations (4)**

Development of leadership skills, personal philosophy. Integrates concepts and practice in group settings.

Prerequisite(s): MGT 105, MGT 106, and MGT 112

**MGT 260 Legal Environment of Business (3)**

History of the law, law of contracts, of agency, sales and personal property. The law of negotiable instruments, partnership, corporations and real property.

Prerequisite(s): ENG 112

**MGT 265 Negotiation Skills (3)**

Psychology and techniques of conducting purchasing and other types of business negotiations; mock negotiations using case studies. Principles apply to situations in personal life.

Prerequisite(s): MGT 105, MGT 106 and MGT 112

**MGT 268 Introduction to International Business (3)**

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 worldwide operations.

Prerequisite(s): MGT 105

**MGT 270 Business Finance (4)**

Financial management of business enterprises with emphasis on financial planning, capital management, capital budgeting, capital markets and time value of money.

Prerequisite(s): ACC 112 and MTH 106

**MGT 290 Business Strategy and Policy Seminar (4)**

Integrated corporate strategy and policy, including competitive strategy, as well as supporting functional strategies. Concepts in competitive positioning, environmental analysis, competitive differential, and niche strategies. Includes management decision-making in the areas of marketing, production, research and development and finance as well as team dynamics and development.

Prerequisite(s): MGT 105, MGT 112, MKT 200, ITS 103

Lab Fee: \$25

## (MKT) Marketing

**MKT 200 Principles of Marketing (4)**

Marketing of products and services. Product development, channels of distribution, pricing structures, promotional aspects and electronic marketing.

Prerequisite(s): CPE 061

**MKT 210 Pricing Strategies (4)**

A comprehensive overview of managerially-focused, integrated, pricing analysis and strategy. Overview of pricing calculation methods and tools, and analysis and identification of pricing strategy effects on the organization.

Prerequisite(s): MTH 106, MKT 200

**MKT 215 Product Management (3)**

Comprehensive overview of product management and the product development process. Overview of a product manager's tasks of market analysis, strategy development, and decision making regarding pricing, advertising, promotion and distribution. Utilization of the marketing plan.

Prerequisite(s): MGT 112, MKT 200

**MKT 240 Electronic Business Applications (4)**

Exploration of electronic business and the unique requirements of conducting business on the Internet. Application of electronic business techniques and tools. Management issues of electronic commerce. Legal, ethical, social responsibility issues.

Prerequisite(s): MGT 105; ITS 103 or GPH 100

Lab Fee: \$20

**MKT 245 Sales and Sales Management (3)**

The role of selling in our economy. Psychology of selling, the sales process, motivation of the salesperson. Fundamentals and techniques of selling in relation to various types of goods and services.

Prerequisite(s): MGT 112, MKT 200

### **MKT 255 Promotion Strategies (4)**

Comprehensive overview of promotion and integrated communication strategies and techniques. Overview of the integrated marketing communication system and its tools for communication with internal and external customers.  
Prerequisite(s): MKT 210; MKT 215

## **(MLT) Medical Laboratory**

### **MLT 101 Medical Laboratory Orientation (2)**

History, role and professional responsibilities of the medical laboratory technician. Organization of the medical laboratory. Medical terminology.  
Prerequisite(s): CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 102

### **MLT 102 Medical Laboratory Orientation Laboratory (1)**

Principles of laboratory instrumentation. Use and care of laboratory instruments. Laboratory safety.  
Prerequisite(s): CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 101  
Lab Fee: \$55

### **MLT 111 Chemistry for Technicians (3)**

Chemistry of matter and measurement, atoms, molecules and ions, formulas, equations and moles, aqueous solution reactions, atomic structure, ionic and covalent bonding, saturated hydrocarbons, unsaturated hydrocarbons, alcohols, aldehydes, ketones and carbohydrates.  
Prerequisite(s): CPE 061 and CPE 101 or appropriate Compass score, Instructor Permission Required  
Student Liability Insurance: \$20

### **MLT 116 Phlebotomy (2)**

Comprehensive background in the theory and principles of phlebotomy. Quality Assurance and Total Quality Management.  
Prerequisite(s): CPE 061 or appropriate Compass score,  
Corequisite(s): MLT 117

### **MLT 117 Phlebotomy Laboratory (2)**

Up-to-date practical instruction in phlebotomy procedures. Quality assurance and total quality management for laboratory practice.  
Prerequisite(s): CPE 061 or appropriate Compass score,  
Corequisite(s): MLT 116  
Lab Fee: \$35

### **MLT 123 Medical Microbiology I (3)**

Identification of bacteria by microscope, media, inoculation, biochemical activities and sensitivity testing. Basic disease processes.  
Prerequisite(s): MLT 101, MLT 102, CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 124

### **MLT 124 Medical Microbiology I Laboratory (2)**

Basic microbiology concepts. Identification of bacteria by microscope, media, inoculation, biochemical activities and sensitivity testing.  
Prerequisite(s): MLT 101, MLT 102, CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 123  
Lab Fee: \$105

### **MLT 125 Hematology I (3)**

The origin, formation and purpose of the formed elements of the blood, differential morphology and staining techniques. Quality control.  
Prerequisite(s): MLT 101, MLT 102, CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 126

### **MLT 126 Hematology I Laboratory (3)**

Manual and automated hematology instrumentation techniques and principles of counting erythrocytes, leukocytes and thrombocytes; determination of red blood cell indices. Quality control.  
Prerequisite(s): MLT 101, MLT 102, CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 125  
Lab Fee: \$100

### **MLT 131 Clinical Chemistry (3)**

Principles, procedures, quality assurance and clinical significance of quantitative chemical analysis of body fluids, carbohydrates, lipids, proteins, electrolytes, endogenous toxic substances, blood gases, pH, enzymes, vitamins, hormones and exogenous toxic substances.  
Prerequisite(s): MLT 111, Instructor Permission Required  
Corequisite(s): MLT 132

### **MLT 132 Clinical Chemistry Laboratory (3)**

Quantitative chemical analysis of body fluids, carbohydrates, lipids, proteins, electrolytes, endogenous toxic substances, blood gases, pH, enzymes, vitamins, hormones and exogenous toxic substances.  
Prerequisite(s): MLT 111, Instructor Permission Required  
Corequisite(s): MLT 131  
Lab Fee: \$105

### **MLT 135 Urinalysis and Body Fluids (2)**

Urinalysis principles including physical and chemical characteristics and microscopic analysis of urinary sediment. Body fluids: amniotic, semen, fecal, synovial, spinal.  
Prerequisite(s): MLT 101, MLT 102, CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 136

### **MLT 136 Urinalysis and Body Fluids Laboratory (2)**

Basic urinalysis techniques including physical and chemical characteristics and microscopic analysis of urinary sediment. Basic techniques for amniotic, semen, fecal, synovial and spinal fluid analysis.  
Prerequisite(s): MLT 101, MLT 102, CPE 061 or appropriate Compass score, Instructor Permission Required  
Corequisite(s): MLT 135  
Lab Fee: \$85

**MLT 211 Immunology (3)**

Principles and theories of the production and characteristics of antigen-antibody reactions, formation and reactions of antigens and antibodies.

Prerequisite(s): ENG 111, BIO 105, MLT 125, MLT 126, and ITS 103, Instructor Permission Required

Corequisite(s): MLT 212

Student Liability Insurance: \$20

**MLT 212 Immunology Laboratory (1)**

Techniques of agglutination, precipitation, flocculation, immunodiffusion, immunofluorescence, ELISA, and EIA.

Prerequisite(s): MLT 125, MLT 126, Instructor Permission Required

Corequisite(s): MLT 211

Lab Fee: \$105

**MLT 213 Medical Microbiology II (3)**

Identification of microbial agents associated with disease in man including bacteria, viruses and parasites. Specimen collection. Quality Control.

Prerequisite(s): ENG 111, BIO 105, ITS 103, MLT 123, MLT 124, Instructor Permission Required

Corequisite(s): MLT 214

**MLT 214 Medical Microbiology II Laboratory (3)**

Techniques to isolate, identify, and evaluate the presence of clinically significant microorganisms.

Prerequisite(s): MLT 123, MLT 124, Instructor Permission Required

Corequisite(s): MLT 213

Lab Fee: \$105

**MLT 223 Hematology II (3)**

Disorders of blood cells and platelets including biochemistry of the red blood cell, anemias and leukemias. Principles and procedures of coagulation.

Prerequisite(s): ENG 111, BIO 105, ITS 103, MLT 125, MLT 126, Instructor Permission Required

Corequisite(s): MLT 224

**MLT 224 Hematology II Laboratory (3)**

Manual and automated instrumentation techniques used within a hematology department. Differential counting of abnormal cells. Coagulation.

Prerequisite(s): MLT 125, MLT 126, Instructor Permission Required

Corequisite(s): MLT 223

Lab Fee: \$70

**MLT 226 Immunohematology (4)**

Responsibility of blood bank work, blood collection and processing. Genotypes and phenotypes of ABO and Rh blood group systems.

Prerequisite(s): MLT 211, MLT 212, Instructor Permission Required

Corequisite(s): MLT 227

**MLT 227 Immunohematology Laboratory (4)**

Typing techniques, principles, procedures; crossmatch and panel screening; atypical antibody identification and quality control.

Prerequisite(s): MLT 211, MLT 212, Instructor Permission Required

Corequisite(s): MLT 226

Lab Fee: \$145

**MLT 270 MLT Review & Update (4)**

Review and update of: urinalysis, hematology, clinical chemistry, medical microbiology, immunology, immunohematology.

Prerequisite(s): All prior coursework leading to a degree in Medical Laboratory Technology, Instructor Permission Required

**MLT 280 Directed Practice (8)**

Clinical site assignment; departmental rotation; application of principles and techniques under supervision of clinical staff and college faculty.

Prerequisite(s): All MLT coursework required prior to graduation, Instructor Permission Required

Corequisite(s): MLT 290

**MLT 290 MLT Seminar (4)**

Weekly review of problems and progress in Directed Practice. Current topics: quality control, review exams, case studies and student presentation of research project.

Prerequisite(s): All MLT coursework required prior to graduation, Instructor Permission Required

Corequisite(s): MLT 280

## **(MST) Multi-Skilled Healthcare**

**MST 101 Introduction to Health Care Delivery (3)**

Introduction to health care delivery system including history, scope of services, providers, settings, financing, professionalism, individual health care rights/responsibilities and current issues and opportunities in health care.

Prerequisite(s): CPE 061 or appropriate COMPASS score

**MST 104 Foundations of Client Care (3)**

Introduction to foundational concepts of client care that apply to any setting. Topics include identification of basic human needs, importance of verbal and oral communication, promoting safe environment, recognition and appropriate response to medical and non-medical emergencies and infection control practices.

Prerequisite(s): CPE 061 or appropriate COMPASS score

**MST 105 Medical Terminology (3)**

Understand the language of medicine and expand vocabulary to better communicate with physicians, nurses and other health personnel. Use of medical dictionaries and develop an understanding of the meanings of medical terms including prefixes, suffixes and root words. Learn to use abbreviations for medical documentation and apply knowledge of medical terminology.

Prerequisite(s): CPE 061 or appropriate COMPASS score

**MST 171 Introduction to Electrocardiography (3)**

Principles of electrocardiography (ECG) including basic cardiac anatomy and physiology, basic ECG interpretation, identification of common abnormal tracings, and equipment operation, troubleshooting and recording of rhythm strips and multi-lead ECGs.

Prerequisite(s): MST 105

Corequisite(s): BIO 105 or BIO 121

Lab Fee: \$15

**MST 181 Nurse Aide Training (6)**

Preparation for long-term care meeting requirements for nurse aide training in Ohio. Classroom training plus 24 clinical hours at the end of the course.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$25

Student Liability Insurance: \$20

**MST 182 Patient Care Technician (4)**

Theory, practice, and evaluation in performing patient care technician skills. Role, job description, legal/ethical issues, personal care and treatments performed by the patient care technician in acute or sub-acute health care facilities. Emphasis on safety, observation and reporting.

Prerequisite(s): MST 181 or STNA credential, EMS 171 or professional CPR certification, Instructor permission

Corequisite(s): MST 105, BIO 105

Lab Fee: \$50

Student Liability Insurance: \$20

**(MTH) Mathematics****MTH 101 Technical Mathematics Applications A (1)**

Applications course for Engineering Technology students. Instruction in the use of scientific calculators, and other technology. Topics include: area & volume, scientific notation and significant figures, metric/English conversions, geometry applications, graphing applications and vector forces.

Prerequisite(s): CPE101 or placement test score, CPE 061

Corequisite(s): CPE 102

Lab Fee: \$10

**MTH 105 Mathematics and Today's World (3)**

A survey of contemporary mathematical ideas and the application of mathematical tools for solving real world problems to demonstrate the variety of problems that can be modeled and solved by quantitative means.

Prerequisite(s): CPE 103 or an appropriate Compass score on the algebra placement test or equivalent

**MTH 106 Business Mathematics (3)**

Development and application of practical business mathematics principles to include: checking accounts, bank reconciliation, percentages and their applications, simple and compound interest, depreciation, markups and markdowns, trade and cash discounts, sales and property taxes, promissory notes, the discounting process, annuities, insurance, loan amortization and business statistics.

Prerequisite(s): CPE 101

**MTH 107 Technical Mathematics Applications B (1)**

Applications course for Engineering Technology students to supplement MTH 121. Instruction in the use of scientific calculators and other technology. Topics include: scientific notation and significant figures, applied functional notation, geometry applications and graphing applications. Applications of linear and quadratic functions and use of conic sections.

Prerequisite(s): CPE 103, MTH 101, CPE 091

Corequisite(s): MTH 120 or MTH 121

Lab Fee: \$10

**MTH 108 Technical Mathematics Applications C (1)**

Applications course for Engineering Technology students to supplement MTH 140. Use of the scientific calculator and other technology. Topics include: applied problems involving radian measure, trigonometric functions, vectors, polar coordinates and trigonometric identities.

Prerequisite(s): MTH 107; MTH 120 or MTH 121, CPE 091

Corequisite(s): MTH 140

Lab Fee: \$10

**MTH 120 College Algebra IA (5)**

Algebraic expressions; coordinates and graphs, transformation and composition of functions, inverse functions, polynomial and rational functions, complex numbers, synthetic and long division, remainder and factor theorem, exponential and logarithmic functions. Note: Topics covered are exactly the same as topics covered in College Algebra I (MTH 121), but this course will involve more in-class practice of important skills.

Prerequisite(s): CPE 061, CPE 103 or appropriate Compass score

**MTH 121 College Algebra I (3)**

Algebraic expressions; coordinates and graphs, transformation and composition of functions, inverse functions, polynomial and rational functions, complex numbers, synthetic and long division, remainder and factor theorem, exponential and logarithmic functions.

Prerequisite(s): CPE 061, CPE 103 or an appropriate Compass score

**MTH 122 College Algebra II (3)**

Continuation of the concepts begun in MTH 121 and includes additional topics in systems of equations and inequalities, analytic geometry, matrices and determinants, Gauss-Jordan, Cramer's Rule, sequences and series, permutations, combinations and probability.

Prerequisite(s): MTH 120 or MTH 121 or an appropriate Compass score

**MTH 140 Trigonometry (3)**

Familiarizes the student with topics in trigonometry, including trigonometric functions, solving triangles, laws of sines and cosines, unit circles, vectors, graphs of trigonometric functions, polar coordinates, identities, and trigonometric equations.

Prerequisite(s): High school geometry and MTH 120 or MTH 121 or an appropriate Compass score

**MTH 220 Calculus for the Management, Life and Social Sciences (5)**

Functions; limits; derivatives of polynomial, exponential, and logarithmic functions; integrals of polynomial, exponential, and logarithmic functions; maxima and minima; applications appropriate to biology, medicine, business, economics, social and behavioral sciences.

Prerequisite(s): MTH 120 or MTH 121 or an appropriate Compass score

**MTH 221 Calculus I (5)**

Functions, limits, L'Hospital's Rule, differentiation rules, continuity and differentiability of trigonometric and logarithmic/exponential functions, applications of the derivatives.

Prerequisite(s): MTH 122 and MTH 140 or an appropriate Compass score

**MTH 222 Calculus II (5)**

Riemann sums, definite and indefinite integrals, improper integrals, applications of the integrals of polynomial, logarithmic, exponential, and trigonometric functions, techniques of integration, differential equations, directional fields and Euler's method, separable equations, exponential growth and decay.

Prerequisite(s): MTH 221

**MTH 223 Calculus III (5)**

Power series, Taylor series, Maclaurin series, vectors, dot product, cross product, equations of lines and planes polar curves, polar coordinates, surfaces, cylindrical and spherical coordinates, parametric curves, vector functions and space curves, derivatives and integrals of vector functions, motion in space and parametric surfaces.

Prerequisite(s): MTH 222

**MTH 224 Calculus IV/ Multivariate Calculus (5)**

Vector valued functions, cylindrical and spherical coordinate functions, partial derivatives, multiple integrals, Stoke's Theorem, Green's Theorem and applications of the above topics.

Prerequisite(s): MTH 223

**MTH 230 Differential Equations (5)**

First order equations, linear equations and systems, series solutions, Laplace transforms, uniqueness and existence of solutions, applications of differential equations.

Prerequisite(s): MTH 223

**MTH 240 Linear Algebra (3)**

Linear systems, matrices, matrix algebra, determinants, linear transformations, eigenvalues, eigenvectors, vector spaces.

Prerequisite(s): MTH 222

**(MUS) Music****MUS 100 Fundamentals of Piano (2)**

Group instruction focusing on the fundamentals of piano performance skills.

Prerequisite(s): none

Lab Fee: \$50

**MUS 130 Music Appreciation (3)**

Survey of Western music from approximately A.D. 1500 onward. Chronological presentation of material supplemented with listening examples and live performances.

Prerequisite(s): CPE 061

**MUS 141 Fundamentals of Piano (1)**

An introductory course focusing on the fundamentals of piano performance skills in a group setting; 2 hours per week

Prerequisite(s): none

Lab Fee: \$50

**MUS 150 Clark State Choir (1)**

Mixed choir specializing in the study and performance of choral works of a variety of stylistic periods, musical theatre, and jazz. School and public performances required. May be repeated up to 6 credit hours.

Prerequisite(s): None

Lab Fee: \$15

**MUS 151 Applied Music I (1)**

Private instrument instruction focusing on the fundamentals of instrument performance skills. Thirty minutes of private instruction per week. A minimum of 6.5 hours of practice time required.

Prerequisite(s): none

Lab Fee: \$50

**MUS 152 Applied Music II (2)**

Private instrument instruction focusing on the fundamentals of instrument performance skills.

One hour of private instruction per week. A minimum of 13 hours of practice time required per week.

Prerequisite(s): none

Lab Fee: \$100

**MUS 160 Applied Voice (1)**

Private voice instruction focusing on the fundamentals of voice production, song literature, interpretation and performance skills.

Prerequisite(s): None

Lab Fee: \$50

**MUS 170 Applied Piano (1)**

Private piano instruction focusing on the fundamentals of piano performance skills.

Prerequisite(s): None

Lab Fee: \$50

**MUS 292 Applied Percussion (1)**

This course will teach students basic techniques and concepts used in modern percussion. Instruction will be individualized; students will progress at their own pace. Students will learn how rhythm, meter, and technique interrelate to make percussion one of the most visceral and powerful arts.

Prerequisite(s): none

Lab Fee: \$100

### **MUS 293 Applied Percussion (2)**

This course will teach students basic techniques and concepts used in modern percussion. Instruction will be individualized; students will progress at their own pace. Students will learn how rhythm, meter and technique interrelate to make percussion one of the most visceral and powerful arts.

Prerequisite(s): none

Lab Fee: \$50

## **(NTK) Network Administration**

### **NTK 176 PC/Network Essentials I (6)**

Basic knowledge for properly installing, configuring, upgrading, and troubleshooting microcomputer hardware. Coverage includes desktop and server systems, basic networking, and printers. First of a three-course sequence that covers A+ certification objectives.

Prerequisite(s): CPE 061

Lab Fee: \$50

### **NTK 178 PC/Network Essentials II (6)**

Intensive introduction to multitasking operating systems and networking operating systems. Coverage includes: operating system upgrades/configuration, installation procedures, security issues, backup procedures, remote access, command line and graphical user interfaces. Second course in a three-course sequence that covers the A+ certification objectives.

Prerequisite(s): CPE 091; NTK 176 or NTK 172 or ITS 172 or CIS 172 or instructor permission

Lab Fee: \$50

### **NTK 179 PC/Network Essentials III (6)**

Overview of local area network technologies. Introduction to the OSI and TCP/IP models, networking devices and network protocols. Hands-on experience with designing and implementing network services.

Prerequisite(s): NTK 178 or NTK 174 or instructor permission

Lab Fee: \$50

### **NTK 201 Cisco Associate I (5)**

Overview of computer networking concepts, theories, and structures. Discussion of the OSI network model, network addressing, data encapsulation and TCP/IP network-layer protocols. This course is part of a set of courses that cover material for the CCNA and Network+ certification exams.

Prerequisite(s): CPE 101; NTK 179 or (NTK 174 and NTK 152) or (NTK 174 and NTK 154) or instructor permission

Lab Fee: \$50

### **NTK 202 Cisco Associate II (5)**

Overview of network router concepts and theory. Discussion of router elements, TCP/IP transport-layer protocols and flow control. Hands-on experience with router setup, configuration and monitoring. This course is part of a set of courses that cover material for the CCNA and Network+ certification exams.

Prerequisite(s): NTK 201 or Instructor permission

Lab Fee: \$50

### **NTK 203 Cisco Associate III (5)**

Advanced network routing and switching concepts and theory. Discussion of IPX protocol, LAN segmentation, bridges, routers, switches, Ethernet, Fast Ethernet and virtual LANS. Hands-on experience with advanced router setup and configuration. This course is part of a set of courses that cover material for the CCNA and Network+ certification exams.

Prerequisite(s): CPE 101; NTK 202 or Instructor permission

Lab Fee: \$50

### **NTK 225 Wireless Networking I (5)**

Overview of wireless network technologies. Emphasis on design, planning, implementation, operation and troubleshooting of WLANS. Hands-on experience with wireless access points, network interfaces, gateways and other devices.

Prerequisite(s): NTK 179 or (NTK 174 and NTK 152) or (NTK 174 and NTK 154) or instructor permission

Lab Fee: \$50

### **NTK 240 Unix/Linux Administration I (5)**

Discussion of the Unix/Linux file system. Maintenance tasks, customizing the GUI interface, Linux commands. File access permissions, printing commands and utilities. Managing user accounts.

Prerequisite(s): NTK 179 or (NTK 174 and NTK 152) or (NTK 174 and NTK 154) or instructor permission

Lab Fee: \$50

### **NTK 245 CyberSecurity - OS and Networks (5)**

Introduction to computer operating system and network security methodologies and processes. Operating system and network hardening and defense strategies.

Prerequisite(s): MGT 211 CyberSecurity Management I

Lab Fee: \$50

### **NTK 246 CyberSecurity - Firewall Technologies (5)**

Introduction to computer and network firewalls. Creation and implementation of network security policies. Discussion of packet filtering, authentication, proxy servers, encryption, virtual private networks and intrusion detection systems.

Prerequisite(s): MGT 211

Lab Fee: \$50

### **NTK 247 CyberSecurity - Forensic Analysis (5)**

Introduction to computer investigative/forensic techniques. Forensic tools, evidence controls, data acquisition, forensic analysis and investigative techniques.

Prerequisite(s): MGT 211

Lab Fee: \$50

### **NTK 255 Introduction to Oracle (5)**

Introduction to database server technology. Relational and object relational databases and SQL. Creation and maintenance of database objects. Store, retrieve and manipulate data. Retrieve data using advanced techniques such as ROLLUP, CUBE, set operators and hierarchical retrieval. One of two classes needed for the Oracle Certified Associate (OCA) certification.

Prerequisite(s): CPE 101; NTK 179 or (NTK 174 and NTK 152) or (NTK 174 and NTK 154) or instructor permission

Lab Fee: \$50

**NTK 256 Oracle Administration I (5)**

Designing, creating, and maintaining an Oracle database. Conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Creation of an operational database and proper management of the various structures in an effective and efficient manner. One of two courses needed for the Oracle Certified Associate (OCA) certification.

Prerequisite(s): NTK 255

Lab Fee: \$50

**NTK 257 Oracle Data Mining & Warehousing (5)**

Planning, designing, building, populating, and maintaining a successful data warehouse. Oracle warehouse data technology. Designing, implementing and running a data warehouse.

Prerequisite(s): NTK 256

Lab Fee: \$50

**NTK 270 Administering Microsoft Professional (5)**

Hands-on experience with the XP Professional operating system. Installing, configuring, optimizing and troubleshooting. Course covers Microsoft certification objectives.

Prerequisite(s): CPE 101; NTK 179 or (NTK 174 and NTK 152) or (NTK 174 and NTK 154) or instructor permission

Lab Fee: \$50

**NTK 272 Administering Microsoft Server (5)**

Hands-on experience with server operating system. Planning, installing, configuring, managing, optimizing and troubleshooting. Course covers Microsoft certification objectives.

Prerequisite(s): NTK 270 or instructor permission

Lab Fee: \$50

**NTK 288 Advanced Networking Topics (5)**

Overview of ethics in the information technology field. Assessment of skills and competencies of Network Administration students through project-based activities. Requires an oral and written presentation. Course should be taken in the last quarter prior to graduation.

Prerequisite(s): ENG 112 or ENG 135; ITS 200; NTK 201 or NTK 270 or NTK 255 or NTK 221 or NTK 211 or instructor permission

**(NUR) Nursing****NUR 110 Nursing Academic Success Seminar (1)**

Knowledge and skills needed for academic success in nursing program and life-long learning. Identify priorities in learning; develop study and time-management skills; enhance test-taking skills. 10 classroom hours.

Prerequisite(s): CPE 062 or equivalent COMPASS score

Corequisite(s): NUR 170

**NUR 114 Dosage Calculations I (1)**

Systems of measurement and calculation of drug dosage. Consists of 20 lab hours.

Prerequisite(s): CPE 091, CPE101 or appropriate Compass scores

**NUR 120 Pharmacology (3)**

Introduction to basic pharmacologic principles, drug administration, consumer safety, and drug regulation in U.S. Discussion of major drug classifications and prototype drugs including mechanism of action, therapeutic uses and important adverse effects. Includes professional nurse's role and responsibilities in drug therapy. Consists of 30 classroom hours.

Prerequisite(s): MST 105, BIO 121, BIO 122, BIO 123, NUR 171

Corequisite(s): NUR 172 must be taken concurrently

**NUR 170 Nursing I (6)**

Introduction of concepts basic to nursing. Basic assessment techniques. Role of nursing in maintenance and promotion of health. Introduction to pharmacology. Introduces nursing process. Consists of 40 classroom, 20 college lab and 40 clinical hours.

Prerequisite(s): MST 181 within past two years or equivalent, MST 105, BIO 121

Corequisite(s): BIO 122, ITS 103, NUR 114

Lab Fee: \$100

Student Liability Insurance: \$20

**NUR 171 Nursing II (6)**

Apply concepts from Nursing I. Integrates Pharmacology and diet therapy in caring for the child and adult with surgery, common problems affecting mobility and common problems affecting gastrointestinal functioning. Examines the application of ethical/legal issues. Consists of 40 classroom, 20 college lab and 40 clinical hours.

Prerequisite(s): BIO 122, ITS 103, NUR 114, NUR 170

Corequisite(s): BIO 123

Lab Fee: \$85

**NUR 172 Nursing III (8)**

Applies concepts from Nursing I and II. Integrates pharmacology and diet therapy in caring for the child and adult with common problems of the cardiovascular system (including stroke), diabetes mellitus and respiratory system. Examines the application of ethical/legal issues. Consists of 50 classroom and 90 clinical hours.

Prerequisite(s): BIO 123, NUR 171

Corequisite(s): NUR 120 must be taken concurrently

Lab Fee: \$85

**NUR 175 Transition to Registered Nursing (4)**

Ohio Nursing Articulation Model transition course. Explore integrative concepts in nursing. Refine and update previous learning. Use of nursing process to solve problems with focus on client assessment and communication. Identify goals for successful transition to Registered Nursing program. Consists of 30 online classroom and 20 college lab hours.

Prerequisite(s): BIO 123, ITS 103, NUR 114, Current Ohio licensure as a practical nurse

Lab Fee: \$112

**NUR 200 Service Learning Project (1)**

Students work in groups to plan, execute, and evaluate a community health promotion project under the guidance and supervision of nursing faculty. Projects meet identified community health needs and reinforce skills and concepts addressed in other nursing courses. Projects are section specific and published with quarter schedule. Consists of 20 lab hours.

Prerequisite(s): NUR 170, ENG 112

Corequisite(s): NUR 175

**NUR 265 Nursing VIII (5)**

Application of the nursing process to meet the needs of clients of various ages in acute and community settings; women's health issues, complex cardiovascular, neurologic and multi-system disorders; ethical, legal and professional practice issues. 40 classroom and 30 clinical hours

Prerequisite(s): NUR 200, NUR 274, NUR 275, NUR 276

Corequisite(s): NUR 266, NUR 267

**NUR 266 Directed Nursing Practice (2)**

Application of nursing process to provide and manage nursing care of groups of clients with common health care problems. Facilitates transition from student to professional nurse. 110 directed practice hours in clinical setting under supervision of registered nurse preceptor.

Prerequisite(s): NUR 200, NUR 274, NUR 275, NUR 276

Corequisite(s): NUR 265, NUR 267,

**NUR 267 Nursing VII (4)**

Application of the nursing process when caring for clients in the extended care facility. Emphasis placed on endocrine and liver disorders; gerontologic nursing; management concepts; health care delivery systems; and ethical, legal and professional practice issues. Consists of 30 classroom and 30 clinical hours.

Prerequisite(s): NUR 200, NUR 274, NUR 275, NUR 276

Corequisite(s): NUR 265, NUR 266

**NUR 268 Nursing VIII (3)**

Application of the nursing process to meet the needs of clients of various ages in acute and community settings. Emphasizes health promotion and growth and development of the young and middle age adult, emergency care concepts, care of adult clients with gynecologic, breast, and immunologic disorders and children with congenital cardiac and neurologic disorders. Examines ethical, legal and professional practice issues as they apply. Consists of 20 classroom and 30 clinical hours.

Prerequisite(s): NUR 274, NUR 275, NUR 276

Corequisite(s): NUR 267, NUR 269

**NUR 269 Nursing IX (6)**

Addresses nursing care of clients with complex cardiovascular, neurologic, and multi-system disorders. Examines ethical, legal, and professional practice and development issues as they apply. Application of the nursing process in an acute care preceptorship to provide and manage the nursing care of groups of clients with common health care problems. Consists of 20 classroom and 120 clinical hours.

Prerequisite(s): NUR 274, NUR 275, NUR 276

Corequisite(s): NUR 267, NUR 268

**NUR 274 Nursing IV (5)**

Family-centered approach to meeting the needs of mother and newborn; application of the nursing process; the normal physiological changes of pregnancy with emphasis on the prevention of complications and conditions of high-risk newborn; experience in the hospital and community setting. Consists of 30 classroom and 60 clinical hours.

Prerequisite(s): BIO 123, BIO 131, NUR 120, NUR 172 or NUR 175, PSY 223

Corequisite(s): NUR 275

Lab Fee: \$30

**NUR 275 Nursing V (5)**

Application of the nursing process in meeting the mental health needs of clients and individuals. Utilization of therapeutic communication techniques, psychiatric treatment modalities and community resources in the prevention and treatment of common emotional and behavioral disorders. Consists of 30 classroom and 60 clinical hours.

Prerequisite(s): BIO 123, BIO 131, NUR 120, NUR 172 or NUR 175

Corequisite(s): NUR 274

Lab Fee: \$30

Student Liability Insurance: \$20

**NUR 276 Nursing VI (11)**

Expands on concepts presented in Level I (NUR 170, 171, 172). Provides care to clients of various age groups with common problems affecting hematologic, cellular, sensory, neurologic and genitourinary functions. Addresses complex nursing care of clients with altered cardiovascular and respiratory function. Utilizes the nursing process to emphasize priority setting and decision making. Hospital and community clinical settings are used for clinical experiences. Consists of 70 classroom and 120 clinical hours.

Prerequisite(s): BIO 123, BIO 131, NUR 120, NUR 172 or NUR 175, PSY 223

Lab Fee: \$80

Student Liability Insurance: \$20

**NUR 280 Nursing Seminar (2)**

Reflection, analysis, and sharing of the final quarter's clinical learning experiences. Structured individual and group program review activities. Application of critical thinking skills to solve a variety of nursing care problems. Consists of 20 classroom hours.

Prerequisite(s): NUR 267, NUR 268, NUR 269

Lab Fee: \$55

**NUR 281 Nursing Comprehensive Review Seminar (2)**

Strengthen nursing knowledge and skills. Review of care for clients across the lifespan. Emphasis placed on current NCLEX-RN test plan. 40 practice lab hours.

Prerequisite(s): NUR 265, NUR 266, NUR 267

Lab Fee: \$55



## **(OAD) Office Administration**

### **OAD 101 Document Production I (5)**

Production of common business correspondence, simple reports, and basic tables, utilizing Microsoft Word software. Emphasis on accuracy.

Prerequisite(s): Ability to key the alphabetic and numeric keys by touch using appropriate techniques at a rate of at least 20 WPM.

### **OAD 102 Document Production II (5)**

Production of complex business correspondence, reports and tables, utilizing Microsoft Word/Excel software. Introduction to desktop publishing. Emphasis on speed and accuracy.

Prerequisite(s): OAD 101 or proficiency test

### **OAD 103 Document Production III (4)**

Production and integration of business documents utilizing Microsoft Office Suite

Prerequisite(s): OAD 102

### **OAD 105 Business English (4)**

A basic business English course covering the following: parts of speech, punctuation, sentence structure, capitalization, number usage, plurals, and possessives.

Prerequisite(s): CPE 061

### **OAD 130 Advanced Grammar & Proofreading (4)**

Mastery of grammar and punctuation concepts and proofreading skills.

Prerequisite(s): OAD 105 or instructor permission

### **OAD 135 Office Procedures (4)**

Basic office skills, including communicating effectively, time management, processing mail, scheduling appointments, greeting visitors, making travel arrangements, planning meetings and conferences and telephone techniques.

Prerequisite(s): OAD 105 or instructor permission

### **OAD 140 Records Management (3)**

Basic principles and procedures of records storage, including alphabetic, geographic, numeric and subject methods as well as records control, retrieval and management.

Prerequisite(s): CPE 061

### **OAD 245 Machine Transcription (4)**

Introduction to machine transcription and production of mailable transcripts of letters, memos, agendas, news releases, speeches, minutes, special projects, etc.

Prerequisite(s): OAD 101, OAD 130; or instructor permission

### **OAD 246 Advanced Machine Transcription (4)**

Machine transcription and production of mailable transcripts of letters, memos, agendas, news releases, speeches, minutes, special projects, etc., of increased difficulty.

Prerequisite(s): OAD 245 or instructor permission

### **OAD 248 Basic Medical Machine Transcription (4)**

Introduction to machine transcription and production of medical documents.

Prerequisite(s): OAD 101, OAD 130

Corequisite(s): BIO 102 or MST105

### **OAD 249 Advanced Medical Machine Transcription (4)**

Machine transcription and production of patients' case histories, x-ray reports, clinical resumes, consultant reports, etc.

Prerequisite(s): OAD 248

### **OAD 256 Medical Office Management (4)**

Development of techniques for acquiring advanced skills in the use of medical office management software.

Prerequisite(s): OAD 102, OAD 135, OAD 140, OAD 248, BIO 102 or MST 105

### **OAD 260 Office Simulation (5)**

A comprehensive course making use of all knowledge and skills necessary to perform the duties in a modern office. A project-centered approach exposing the student to a wide variety of situations demanding judgment, initiative, decision-making, organizing and planning work, meeting deadlines and other related administrative abilities.

Prerequisite(s): ENG 221, ITS 12D, ITS 12S, OAD 103, OAD 135, OAD 140

Corequisite(s): ITS 12P

### **OAD 270 CPT-Coding (5)**

Introduction to ambulatory coding and payment systems emphasizing CPT-4 coding.

Prerequisite(s): BIO 102 or MST 105, BIO 105

### **OAD 272 ICD-9-CM Coding (5)**

Introduction to the nomenclature and major classification and indexing systems in ICD-9-CM utilized in coding medical information.

Prerequisite(s): BIO 102 or MST 105, BIO 105

### **OAD 275 Medical Coding Trends & Issues (4)**

Policies, forms, technology, and processes associated with medical billing protocol. Medicare information. Reimbursement. Health-care management policies. Pharmacology facts, rules, and guiding principles.

Prerequisite(s): BIO 102 or MST 105, BIO 105, OAD 270, OAD 272

### **OAD 276 Advanced Medical Coding (5)**

Coding experience using ICD-9-CM and CPT numeric representation. Specialized areas of coding. Certifications related to specialty areas

Prerequisite(s): BIO 102 or MST 105, BIO 105, OAD 270, OAD 272

### **OAD 285 Co-op Education/Internship (2)**

Relating academic studies to the world of work through work experience and seminars, becoming familiar with an office or medical office career, applying principles and theories learned in classroom experiences, establishing learning outcomes and preparing related reports.

Prerequisite(s): EBE 100, or OAD 249, OAD 260 or OAD 256, approved co-op placement

## **(PED) Physical Education**

### **PED 101 Step Aerobics (1)**

Warm-up exercises, strength and flexibility exercises, and cool down exercises. Knowledge of safe fitness techniques and benefits.

Prerequisite(s): None

### **PED 102 Beginning Pilates Mat Science (1)**

Proper breathing, principles of mat science, components of fitness, Pilates equipment

Prerequisite(s): None

### **PED 104 Beginning Karate (1)**

Punching and kicking drills, takedown, self-discipline and control of hostile situations. History, philosophy and discipline used in Kenpo and Aikijitsu. Belt rank in karate optional at additional cost.

Prerequisite(s): None

### **PED 105 Intermediate Karate (1)**

Intermediate level kicks, hand techniques, hand trapping and escapes. Knowledge of martial arts background. Belt rank in karate optional at additional cost.

Prerequisite(s): PED 104 or equivalent experience as determined by instructor

### **PED 117 Beginning Weight Training (1)**

Correct weight training procedures, proper handling of equipment, training principles, composition of an individual total workout program and dietary effects.

Prerequisite(s): None

### **PED 118 Intermediate Weight Training (1)**

Intermediate level of free weight training. Setting up a personal program. Safety and nutrition information.

Prerequisite(s): PED 117

### **PED 144 Beginning Tennis (1)**

Forehand drive, backhand drive, volleying, serving, and footwork. History, rules, terms, scoring, simple strategies and the etiquette of tennis.

Prerequisite(s): None

### **PED 145 Intermediate Tennis (1)**

Advanced skills in forehand, backhand shots and serving. Approach shots, net play, backhand game, drop and chop shots. Advanced rules, strategies, and tennis etiquette.

Prerequisite(s): None

### **PED 151 General Physical Conditioning (1)**

Principles and benefits of physical conditioning, warm-up/stretching exercises, aerobic and strength exercises (walking, jogging, rope skipping, stationary biking, weight training), flexibility exercises and cool down exercises.

Prerequisite(s): None

### **PED 153 Yoga for Beginners (1)**

Reducing stress through focused breathing and relaxation exercises using meditation techniques. Graded S/U.

Prerequisite(s): None

### **PED 154 Yoga II (1)**

Using Yoga and meditation techniques to reduce stress.

Prerequisite(s): PED 153 Yoga for beginners

### **PED 160 Beginning Basketball (1)**

Shooting, passing, dribbling, and defense along with game play. Includes equipment, rules, terms, scoring and etiquette of basketball.

Prerequisite(s): None

### **PED 162 Intermediate Basketball (1)**

Shooting, passing, dribbling, and defense along with game play. Includes equipment, rules, terms, scoring and etiquette of basketball.

Prerequisite(s): None

### **PED 171 Beginning Golf (1)**

Driving, putting, chipping and pitching along with fair play. Also includes the history, equipment, rules, terms, scoring and etiquette of golf.

Prerequisite(s): None

Lab Fee: \$20

### **PED 172 Intermediate Golf (1)**

Refining basic strokes, practice techniques, the mental side of golf, course management, advanced short game instruction and bunker play. Additional history and etiquette.

Prerequisite(s): None

Lab Fee: \$20

### **PED 295 Introduction to Baseball/Softball Officiating (1)**

Development of knowledge and skills to become certified baseball and softball officials. Includes scorebook keeping, game techniques and supervised experience.

Prerequisite(s): CPE 061

Lab Fee: \$12

## **(PGR) Personal Growth**

### **PGR 101 Introduction to College Success (2)**

Empowers students to make a successful transition to the college environment. Topics: goal setting, prioritizing, advising tools, critical thinking and campus resources.

Prerequisite(s): None

### **PGR 150 Personal Growth (3)**

Designed to provide students with an opportunity to examine themselves--their abilities, attitudes, interests, learning styles, personality traits and values to improve self-awareness and self-confidence.

Prerequisite(s): None

### **PGR 153 College Survival Skills (3)**

Fundamentals of becoming a successful student. It covers strategies to develop. Course covers goals, time management, study strategies, note taking and test taking.

Prerequisite(s): None

Lab Fee: \$9

**PGR 154 Reading for Speed and Comprehension (3)**

This course improves both reading speed and comprehension, is intended for students of average or above average reading abilities, and uses a variety of methods, including computer-aided instruction.

Prerequisite(s): CPE 062 or appropriate Compass score

**PGR 191 Study Skills (1)**

This course is designed to offer students the opportunity to foster self-confidence in problem solving. The process includes: a self-assessment of certain personal skills required for success in college, a determination of need for change, and the development of a goal to facilitate a successful outcome. Graded S/U.

Prerequisite(s): None

Lab Fee: \$9

**PGR 192 Career Directions (1)**

Overview of career choice processes and exploration of career alternatives and career decision making. Includes: researching career information, career decision making, reviewing occupational options, information sharing and educational planning. Graded S/U.

Prerequisite(s): None

Lab Fee: \$9

**PGR 194 Stress Management (1)**

Identify stressors and manage stress in daily life. Individual stress assessment, cognitive-affective-physical techniques for stress management, stress in society, stress in the workplace, health and stress and personal and community resources. Graded S/U.

Prerequisite(s): None

**PGR 195 Campus Leadership (1)**

Practical approach to student leadership situations to increase technical skills involved in campus organizations. Graded S/U.

Prerequisite(s): None

**PGR 196 Effective Parenting (1)**

Information and skills to meet the difficult challenges of raising children. Includes: discipline, communication, problem-solving and encouragement. Graded S/U.

Prerequisite(s): None

**PGR 197 Building Positive Personal Relationships (1)**

Information and skills that help create positive and successful personal relationships, as well as those qualities that make personal relationships endure. Graded S/U.

Prerequisite(s): None

**PGR 250 Exploring Our Sexualities (3)**

Analysis of the impact of social and cultural values and norms on human sexuality.

Prerequisite(s): None

Corequisite(s): ENG 111

## (PHL) Philosophy

**PHL 110 Problems in Philosophy (3)**

Introduction to the philosophical method. A critical survey of arguments from various philosophical perspectives that have been offered as solutions to problems concerning the nature of reality, God's existence, the nature of mind, the nature and sources of knowledge and the nature of moral value.

Prerequisite(s): CPE 071 or appropriate COMPASS score

Corequisite(s): ENG 111

**PHL 111 Problems in Philosophy: Honors (3)**

Honors-level introduction to the philosophical method. A critical survey of arguments from various philosophical perspectives that have been offered as solutions to problems concerning the nature of reality, God's existence, the nature of mind, the nature and sources of knowledge and the nature of moral value. Writing intensive. Students may not take both PHL 110 and PHL 111 for credit toward graduation.

Prerequisite(s): ENG 112

**PHL 200 Critical Thinking (3)**

Introduction to basic reasoning skills: the student learns to distinguish knowledge from belief and truth, evaluate relevant information, identify assumptions, detect biased and fallacious reasoning, identify, analyze and evaluate basic inductive and deductive arguments.

Prerequisite(s): CPE 071 or appropriate COMPASS score

Corequisite(s): ENG 111

**PHL 205 Deductive Logic (3)**

Formal methods for determining the validity of deductive arguments; construction of truth tables, sentential proofs and Venn diagrams.

Prerequisite(s): CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**PHL 210 Ethics (3)**

Philosophical analysis of the predominant ethical theories from various cultures. Application of these theories from various cultures. Application of these theories to contemporary moral problems such as capital punishment, abortion, euthanasia, racism and same-sex marriage in order to develop a method for approaching moral concerns.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**PHL 220 Business Ethics (3)**

Application of philosophical analysis and ethical theories to the moral problems arising from the world of business such as the morality of capitalism, corporate responsibility, the morality of advertising, drug testing, business's responsibility to the environment and the moral dimension of information technology. Discussion of how moral values affect, and are affected by, business institutions and practices.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**PHL 230 Medical Ethics (3)**

Application of philosophical analysis and ethical theories to the moral problems arising from modern medical care such as abortion, patients' rights, euthanasia, and experimentation with human subjects and ethics of cloning. Discussion of how moral values affect, and are affected by, medical and biological knowledge and practice.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**PHL 240 Philosophy of World Religions (3)**

Philosophical analysis of the basic beliefs of the major world religions including: Hinduism, Buddhism, Confucianism, Daoism, Judaism, Christianity and Islam. Topics may include: the concepts and existence of religious reality; God, Brahaman, Dao, and the Void; grounds for belief and disbelief; science and religion; revelation and faith; religious language; miracles; the problems of evil; resurrection; karma; and reincarnation.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**PHL 250 Great Books: Philosophy (3)**

Critical investigation of selected great books chosen from each of the three periods of the Western philosophical tradition: ancient/medieval, modern, and contemporary written by such philosophers as Plato, Aquinas, Descartes, Hume, Kant, Russell, Sartre and Wittgenstein.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**(PHO) Photography****PHO 111 Photography I (3)**

An introductory course in the fundamentals of 35mm photography and the black and white darkroom.

Prerequisite(s): CPE 061

Lab Fee: \$50

**PHO 112 Photography II (3)**

Continuation of Photography I. Emphasis on photography as a tool. Required use of medium-format camera and darkroom.

Prerequisite(s): PHO 111

Lab Fee: \$50

**PHO 121 Color Photography I (3)**

An introductory course using 35mm cameras, color negative/positive films, and the fundamentals of color developing and printing.

Prerequisite(s): PHO 111

Lab Fee: \$50

**PHO 122 Color Photography II (4)**

A continuation of Color Photography I. Emphasis placed upon 35mm format photography. Color negative materials will be processed and scanned into digital format and present as a color slide presentation.

Prerequisite(s): PHO 121

Lab Fee: \$50

**PHO 124 Photography Portfolio (4)**

Selection and presentation of photographs for your personal portfolio. All material will be reviewed and corrections made by processing and printing of color materials.

Prerequisite(s): PHO 112, PHO 121

**PHO 130 Digital Photography I (3)**

An introductory course in the fundamentals of digital photography which would include the basics in digital camera operation and downloading the finished product to a computer. Additional time will be spent learning the affiliated software to finish the photographs.

Prerequisite(s): CPE 061 or appropriate Compass score

Lab Fee: \$50

**PHO 131 Digital Photography II (3)**

A continuation of digital photography basics to include photographing techniques such as lighting and depth of field. The software used in this course will allow the student to manipulate the photograph into a finished product.

Prerequisite(s): PHO 130

Lab Fee: \$50

**PHO 132 Digital Photography III (3)**

A continuation of basic digital imaging with the emphasis of using skills gained in PHO-131. The student will be introduced to commercial software and will apply that software to exercises from the instructor.

Prerequisite(s): CPE-061 or appropriate compass score, PHO-130 PHO-131

Lab Fee: \$25

**PHO 180 Photography Practicum (3)**

Includes assignment to photographic business establishment to perform functions of that business. Supervision by business professionals.

Prerequisite(s): PHO 112, PHO 124, PHO 121, CRJ 118

Corequisite(s): PHO 122

**(PHY) Physics****PHY 105 Fundamentals of Scientific Methods and Problem Solving (3)**

Measurement and use of units appropriate to length, area and volume, mass and density. Unit conversions, development of mathematical relationships from laboratory situations, manipulation of variables and experimental design, process of science (scientific method).

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): CPE 071

Lab Fee: \$15

**PHY 110 Fundamentals of Physics (5)**

Concepts in physics for students with no previous physics or science background. Scientific method, systems of units, vectors, mechanics, properties of matter, heat, sound, electricity, and light. Laboratory component incorporates computer-assisted data gathering and analysis.

Prerequisite(s): CPE 101 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

Lab Fee: \$15

**PHY 111 Physics I (4)**

Mechanics; accelerated motion; work, energy, and power; conservation of energy and momentum; static equilibrium; mechanical properties of matter, stress and strain.

Prerequisite(s): CPE 071 or appropriate Compass Score and PHY 110, ENT 101, MTH 120 or MTH 121

Corequisite(s): MTH 140 and ENG 111

Lab Fee: \$15

**PHY 112 Physics II (4)**

Fluids, waves, heat, and optics; fluid mechanics; elasticity, harmonic motion and waves; temperature, thermal effects, gas laws, heat transfer, and basic thermodynamics; reflection, refraction, mirrors, and lenses; selected topics in modern physics.

Prerequisite(s): CPE 071 or appropriate Compass score and PHY 111, MTH 140

Corequisite(s): ENG 111

Lab Fee: \$15

**PHY 113 Physics III (4)**

Electricity and magnetism; electrostatics, charge, and potential; direct current circuits; Ohm's law, electromotive forces, series and parallel circuits; capacitance; electromagnetism, magnetic forces, induced currents; alternating currents.

Prerequisite(s): CPE 071 or appropriate Compass score and PHY 112, MTH 140

Corequisite(s): ENG 111

Lab Fee: \$15

**PHY 120 Astronomy (4)**

An introduction to Astronomy; astronomical terminology, origins and composition of our universe and solar system, planetary features and the quest to find other life forms in our universe.

Prerequisite(s): CPE 071 or appropriate Compass score and Satisfactory score on math placement test

Corequisite(s): ENG 111

Lab Fee: \$40

**PHY 250 General Physics I (6)**

The fundamentals of statics, kinetics, dynamics, work and energy, momentum, rotation, oscillations, gravity and fluids. Introduction of calculus in interpreting physical phenomena.

Prerequisite(s): Appropriate Compass score PHY 110 or PHY 111

Corequisite(s): ENG 111 and MTH 221

Lab Fee: \$15

**PHY 251 General Physics II (5)**

Continuation of General Physics I covering electrostatics, capacitance, DC circuits, magnetism, electromagnetic waves and AC circuits. Use of calculus in interpreting physical phenomena.

Prerequisite(s): ENG 111 and PHY 250

Corequisite(s): MTH 222 and ENG 112

Lab Fee: \$15

**PHY 252 General Physics III (5)**

Continuation of General Physics II covering wave motion, heat, laws of thermodynamics, kinetic theory, electromagnetic waves, geometrical optics, interference, and diffraction. Use of calculus in interpreting physical phenomena.

Prerequisite(s): PHY 251

Corequisite(s): MTH 223

Lab Fee: \$15

**(PLS) Political Science****PLS 110 American National Government (3)**

Basic concepts and structure of national government, focusing on checks and balances, federalism, civil rights and liberties, political parties, elections, interest groups, media, political institutions and public policy.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): CPE 071

**PLS 120 American Issues (3)**

Exploration of political and social issues in Government. Historical documents reveal the dynamics of living in America.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**PLS 130 Political Issues (3)**

Nature and uses of political power in contemporary life, focusing on power relationships in public issues, such as crime and violence; poverty; ecology; budget choices; federalism; racism and sexism; urban affairs; defense and arms control and ideological conflicts.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**PLS 220 Constitutional Law (3)**

A broad understanding of the American Federal Constitution dealing largely with civil rights, voting rights and basic freedoms as drawn from the first and fourteenth amendments.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**PLS 230 International Politics (3)**

Introduction to the international political system including state and non state actors, conflict roots, approaches to peace-keeping and current issues.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

**(PSY) Psychology****PSY 111 Psychology I (3)**

An introduction to the fundamental principles and practices of psychology. Includes theories and methods, biological factors influencing behavior, learning, memory, thinking, intelligence, language, human development and personality.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): CPE 071

### **PSY 112 Psychology II (3)**

An introduction to the fundamental principles and practices of psychology continued. Includes sensation and perception, states of consciousness, motivation, emotion, stress, social behavior and abnormal behavior. This is not a general education elective for students seeking technical degrees. Prerequisite(s): CPE 071 or appropriate Compass score and PSY 111

Corequisite(s): ENG 111

### **PSY 221 Human Growth and Development I (3)**

Biological, intellectual, social, and personality development from conception through adolescence. This is not a general education elective for students seeking a technical degree.

Prerequisite(s): PSY 111 and ENG 111

Corequisite(s): ENG 112

### **PSY 222 Human Growth and Development II (3)**

Biological, intellectual, social, and personality development from early adulthood through old age. This is not a general education elective for students seeking a technical degree.

Prerequisite(s): PSY 221

### **PSY 223 Lifespan Human Growth and Development (5)**

A lifespan study of the biological, intellectual, and psychosocial development of human beings and the issues surrounding these developments.

Prerequisite(s): PSY 111, ENG 111

Corequisite(s): ENG 112

### **PSY 230 Abnormal Psychology (3)**

Overview of facts and theories pertaining to abnormal behavior. Includes classifications, diagnoses, causes, and treatments of abnormal behavior. Includes schizophrenia, and the following disorders: anxiety, mood, dissociative, eating, personality, sexual, brain and childhood disorders.

Prerequisite(s): PSY 111 and ENG 111

Corequisite(s): ENG 112

### **PSY 299 Special Topics: Lifespan Human Growth & Development (5)**

A lifespan study of the biological, intellectual, and psychosocial development of human beings and the issues surrounding these developments.

Prerequisite(s): PSY 111, ENG 111

Corequisite(s): ENG 112

## **(PTA) Physical Therapist Assistant**

### **PTA 110 PTA Survey (3)**

Introduction to the role and scope of physical therapist assistant practice. Legal and ethical accountability. History of the PT and professional organizations. Health delivery systems. Introduction to interpersonal communication skills, cultural diversity, disability awareness and professional behavior.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

### **PTA 120 Introduction to Patient Management (2)**

Introduction and practice of basic therapeutic procedures: body mechanics, vital signs, infection control, goniometry, manual muscle testing; verbal and written communication and professional behavior.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score, instructor permission

Corequisite(s): ENG 111

Lab Fee: \$10

### **PTA 145 PTA Procedures I (4)**

Continuation of goniometry and manual muscle testing for all joints. Introduction to therapeutic exercise. Documentation. Professional behavior development.

Prerequisite(s): BIO 118, BIO 121, MST 105, PTA 110, PTA 120

Corequisite(s): BIO 122, BIO 230, PSY 111

Lab Fee: \$10

### **PTA 146 PTA Procedures II (5)**

Pathology, data collection, and PT intervention for cardiopulmonary, lymphatic, immune, endocrine/metabolic integumentary, gastrointestinal, genitourinary and respiratory disorders; positioning, wheelchair and bed mobility, transfers. Application of heat and cold, massage and traction. Professional behavioral development.

Prerequisite(s): BIO 122, BIO 230, PTA 145 and ENG 111

Corequisite(s): PTA 160, ENG 112, BIO 123

Lab Fee: \$25

### **PTA 160 PTA Rehabilitation I (6)**

Pathology, data collection and PT intervention for orthopedic and musculoskeletal disorders; positioning, bed mobility, transfers, gait training and therapeutic exercise. Professional behavioral development.

Prerequisite(s): BIO 122, BIO 230, PTA 145 and ENG 111

Corequisite(s): BIO 123, PTA 146 and ENG 112

Lab Fee: \$10

### **PTA 241 PTA Procedures III (5)**

Physical agents including E-stim, hydrotherapy, diathermy, ultrasound, TENS, MENS, phonophoresis, iontophoresis. Integumentary system and wound care. Theories of pain. Professional behavioral development.

Prerequisite(s): PTA 146, PTA 160

Lab Fee: \$30

Certification Fee: \$35

### **PTA 245 PTA First-Year Capstone (1)**

First year capstone; includes goniometry, manual muscle testing, wheelchair mobility, transfers, gait training, exercise design, clinical reasoning, communication and professional behavioral development.

Prerequisite(s): PTA 110, PTA 120, PTA 145, PTA 146, PTA 160

Corequisite(s): PTA 241

**PTA 260 PTA Rehabilitation II (6)**

Pathology, data collection and PT intervention for neurological disorders; positioning, bed mobility, transfers, gait training and therapeutic exercise. Normal motor development and motor control. Professional behavioral development.

Prerequisite(s): PTA 146, PTA 160, PTA 241, PSY 223

Corequisite(s): PTA 281, PTA 291

Lab Fee: \$10

Certification Fee: \$35

**PTA 265 PTA Rehabilitation III (6)**

Adult and pediatric orthopedic and neurological impairments requiring advanced treatment concepts. Prosthetics, orthotics, adaptive seating. Chronic pain. Environmental assessment. Professional behavioral development.

Prerequisite(s): PTA 260

Corequisite(s): PTA 282, PTA 292

Lab Fee: \$10

Certification Fee: \$35

**PTA 270 PTA Trends and Issues (2)**

Current trends in practice. Health care financing. Interpersonal communications. Contracts. Supervisory/management skills. Ethical issues. Professional behavioral development.

Prerequisite(s): PTA 110, PTA 281, PTA 291

Corequisite(s): PTA 282, PTA 292

Certification Fee: \$35

**PTA 281 Directed Practice I (3)**

Provision of physical therapy services in a clinical setting; application of knowledge and role, performance of skills and professional behavior at a developing level; supervised by clinical and academic faculty; part-time, 16 hours/week.

Prerequisite(s): PTA 241, PTA 245

Corequisite(s): PTA 260, PTA 291

Student Liability Insurance: \$20

Certification Fee: \$35

**PTA 282 Directed Practice II (3)**

Provision of physical therapy services in a clinical setting; continued application of knowledge and role, performance of skills and professional behavior at a progressively developing level; supervised by clinical and academic faculty; part-time 16 hours/week.

Prerequisite(s): PTA 260, PTA 281, PTA 291

Corequisite(s): PTA 265, PTA 292

Certification Fee: \$35

**PTA 283 Directed Practice III (6)**

Provision of physical therapy services in a clinical setting; continued application of knowledge and role, performance of skills and professional behavior; performance progresses to entry level consistent with the role of the physical therapist assistant in implementing the plan of care established by the physical therapist; supervised by clinical and academic faculty; full-time 40 hours/week for eight weeks.

Prerequisite(s): PTA 282, PTA 292,

Corequisite(s): PTA 293

Certification Fee: \$35

**PTA 291 Seminar I (2)**

Discussion of clinical situations and problem solving; focus on self-evaluation; understanding the work setting and client, coworker behaviors, related to Directed Practice I. Also selected topics as instructor determines.

Prerequisite(s): PTA 241, PTA 245

Corequisite(s): PTA 260, PTA 281

Certification Fee: \$35

**PTA 292 Seminar II (2)**

Discussion of clinical situations and problem solving; focus on self-evaluation; understanding the work setting and client/coworker behaviors, related to Directed Practice II; select topics.

Prerequisite(s): PTA 291

Corequisite(s): PTA 282

Certification Fee: \$35

**PTA 293 Seminar III (2)**

This course is a companion course to PTA 283, and serves to assess students' readiness to enter the field of physical therapy at entry level based on student responses to simulated clinical situations. Students will present a Capstone Portfolio that encompasses didactic and clinical information collected throughout the clinical experiences. The students will also demonstrate the ability to utilize knowledge and skills learned and developed over the course of the PTA program by presenting a Capstone project.

Prerequisite(s): PTA 292

Corequisite(s): PTA 283

Lab Fee: \$30

Certification Fee: \$35

## **(RCC) Realtime Closed Caption**

**RCC 110 Introduction to the Deaf Community (4)**

An overview of the Deaf community and its social, cultural, and educational experiences. Introduction to American Sign Language as used in the United States and parts of Canada, the myths and misconceptions of the Deaf community, and local services available to the Deaf community.

Prerequisite(s): CPE 061 or DPE 061

**RCC 221 Captioning/CART I (2)**

Introduction to realtime captioning/CART skill including using captioning software, building and managing dictionaries and finger spelling.

Prerequisite(s): RTR 108 (formerly RTR 102) with C or better grade; RTR 111, RTR 131

Lab Fee: \$15

**RCC 222 Captioning/CART II (2)**

Continued development of realtime captioning/CART skills, which include using captioning software, building and managing dictionaries and finger spelling.

Prerequisite(s): RCC 211 or RCC 221 and RTR 201 at 120 wpm

Lab Fee: \$15

### **RCC 223 Captioning/CART III (2)**

Advanced realtime captioning/CART skills, which include using captioning software, building and managing dictionaries and finger spelling. Expanded use of the Clark State captioning studio.

Prerequisite(s): RCC 212 or RCC 222 and RTR 202 at 140 wpm

Lab Fee: \$15

### **RCC 231 Captioning/CART Speed Building I (1)**

Development of writing skills in two- and multi-voice dictation, including readback and analysis of shorthand notes, realtime writing and quality practice habits. Encompasses speeds ranging from 120-180 wpm.

Prerequisite(s): RTR 108, RTR 112

Lab Fee: \$15

### **RCC 232 Captioning/CART Speed Building II (1)**

Development of writing skills in two- and multi-voice dictation, including read-back and analysis of shorthand notes, realtime writing and quality practice habits. Encompasses speeds ranging from 140-200 wpm.

Prerequisite(s): RCC 231

Lab Fee: \$15

### **RCC 233 Captioning/CART Speed Building III (1)**

Development of writing skills in two- and multi-voice dictation, including readback and analysis of shorthand notes, realtime writing and quality practice habits. Encompasses speed ranging from 160-225 wpm.

Prerequisite(s): RCC 232

Lab Fee: \$15

### **RCC 245 Business Practices (2)**

Overview of broadcast captioning and CART including but not limited to the psychology of on-air captions, FCC regulations, broadcast news production, pre-scripting, the CART Provider's Manual, Guidelines for Professional Practice and the Americans with Disabilities ACT (ADA).

Prerequisite(s): CPE 101, RCC 211, RTR 201

### **RCC 280 Captioning: The Professional Experience (0.5)**

Broadcast captioning practice with a minimum of 40 hours in the broadcast studio, or other approved activity.

Prerequisite(s): RCC 212, RCC 245, RTR 202; working speed of 180 wpm

### **RCC 281 CART: The Professional Experience (0.5)**

CART practice with a minimum of 40 hours in the classroom or other approved activity.

Prerequisite(s): RCC 212, RCC 245, RTR 202; working speed of 180 wpm

## **(RES) Real Estate Principles**

### **RES 232 Real Estate Principles (4)**

Basic course in real estate with focus on Ohio regulations, principles, and practices. Introduction to the nature of real property, rights and interests in land and ownership. Guidelines and operations for the real estate professional.

Prerequisite(s): CPE 061

### **RES 235 Real Estate Law (4)**

An overview of several basic areas of law relating to the real estate profession. Includes law of contracts, agency, and civil rights. Develops a working knowledge of documents including deeds, mortgages, and listing and purchase agreements.

Prerequisite(s): CPE 061

### **RES 240 Real Estate Appraisal (2)**

Survey course of real estate appraisal. Practical application of principles. Techniques of real estate appraisal using the methods of cost, sales comparison and income capitalization. Appraisal process and factors that influence the value of real estate. Primary focus on single-family residential property. Some aspects of residential and commercial income producing properties.

Prerequisite(s): CPE 061

### **RES 245 Real Estate Finance (2)**

A study of real estate finance as it pertains to the financing of real estate in both primary and secondary markets.

Prerequisite(s): CPE 061

## **(RJR) Realtime Judicial Reporting**

### **RJR 211 Advanced Testimony I (3)**

Development of writing skills in two- and multi-voice dictation, including read-back and analysis of shorthand notes, proofreading skills, and quality practice habits. This course encompasses speeds ranging from 120-180 wpm.

Prerequisite(s): RTR 112

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RJR 212 Advanced Testimony II (3)**

Continued development of writing skills in two- and multi-voice dictation, including read-back and analysis of shorthand notes, proofreading skills and quality practice habits. This course encompasses speeds ranging from 140-200 wpm.

Prerequisite(s): RJR 211

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RJR 213 Advanced Testimony III (3)**

Continued development of writing skills in two- and multi-voice dictation, including read-back and analysis of shorthand notes, proofreading skills and quality practice habits. Successful completion of this course requires that the student demonstrate the terminal speed skill of 225 wpm at 95 percent accuracy. Must be completed within 12 months prior to graduation.

Prerequisite(s): RJR 212

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RJR 231 Jury Charge I (3)**

Development of writing skills in jury charge dictation, including read-back and analysis of shorthand notes, proofreading skills and quality practice habits. This course encompasses speeds ranging from 100-160 wpm.

Prerequisite(s): RTR 108 or RTR 102

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15



### **RJR 232 Jury Charge II (3)**

Continued development of writing skills in jury charge dictation, including read-back and analysis of shorthand notes, proofreading skills and quality practice habits. This course encompasses speeds ranging from 120-180 wpm.

Prerequisite(s): RJR 231

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RJR 233 Jury Charge III (3)**

Continued development of writing skills in jury charge dictation, including read-back and analysis of shorthand notes, proofreading skills and quality practice habits. Successful completion of this course requires that the student demonstrate the terminal speed skill of 200 wpm at 95 percent accuracy. Must be completed within 12 months prior to graduation.

Prerequisite(s): RJR 232

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RJR 245 Office Management (3)**

Role of the realtime reporter in trials, depositions, and administrative hearings; overview of transcript preparation and production; development of office management skills; resume preparation and the interview process; professional development in dress and conduct; involvement in professional associations and appreciation of continuing education.

Prerequisite(s): CPE 101, RJR 211

Corequisite(s): RTR 132

### **RJR 280 Judicial Reporting: The Professional Experience (1)**

Judicial reporting practice in both the official and freelance areas, with a minimum of 40 writing hours in each.

Prerequisite(s): RTR 132, RJR 212, RJR 232, RJR 245, RTR 202

## **(RST) Regional Studies**

### **RST 260 Regional Studies of Asia - China (3)**

An introduction to the land, history, social institutions, art, literature, and philosophical/religious institutions of China.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **RST 262 Regional Studies North India (3)**

An introduction to the land, people, history, politics, social institutions, literature, and the philosophical and religious heritage of India.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **RST 270 Regional Studies of Africa (3)**

An introduction to the land, people, history, politics, social institutions, economic development, literature and the arts of Africa.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

### **RST 280 Regional Studies of Latin America (3)**

An introduction to the land, people, history, politics, social institutions, economic development, literature and the arts of Latin America.

Prerequisite(s): ENG 111

Corequisite(s): ENG 112

## **(RTR) Realtime Reporting**

### **RTR 105 Realtime Theory (7)**

Writing, reading, and translating the spoken word by means of a conflict-free realtime theory. Emphasis on mastery of machine shorthand principles, speed development of 60 wpm on dictation of familiar material and rapid and accurate reading of notes.

Prerequisite(s): DEV 061 or CPE 061

Lab Fee: \$15

### **RTR 106 Realtime Theory Reinforcement (2)**

Reinforcement of computer shorthand realtime theory principles. Development of read-back skills. Development of quality practice-session techniques.

Prerequisite(s): RTR 105

Corequisite(s): RTR 107

### **RTR 107 Beginning Speed Building I (3)**

Development of writing skills, read-back and analysis of shorthand notes, proofreading skills and quality practice habits. Live classroom dictation on both new and familiar material. This course encompasses speeds ranging from 60-120 wpm.

Prerequisite(s): RTR 105 or RTR 100

Corequisite(s): RTR 152

Lab Fee: \$15

### **RTR 108 Beginning Speed Building II (3)**

Continued development of writing skills, read-back and analysis of shorthand notes, proofreading skills and quality practice habits. Live classroom dictation on both new and familiar material. The course encompasses speeds ranging from 80-120 wpm.

Prerequisite(s): RTR 107

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RTR 110 Survey of Realtime Reporting (1)**

An overview of the opportunities available in the field of realtime reporting, including the skills and knowledge required, professional organizations and the ethics of realtime reporting. Areas of discussion will include: Judicial Reporting, Official Reporting, Freelance Reporting, Closed Captioning, CART, Medical Transcription, Data Entry, NCRA, OCRA, NCRA Code of Professional Ethics, Certifications, continuing Education Units (CEU'S), and Life-long Learning.

Prerequisite(s): DEV 061 or CPE 061

### **RTR 111 Beginning Testimony I (3)**

Development of skill in writing question-and-answer dictation with emphasis on speeds ranging from 80-120 wpm.

Prerequisite(s): RTR 101 or RTR 107

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

**RTR 112 Beginning Testimony II (3)**

Development of skill in writing question-and-answer dictation with emphasis on speeds ranging from 100-160 wpm.

Prerequisite(s): RTR 111

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

**RTR 120 Law and Legal Terminology (2)**

Overview of the judicial system and the legislative process with emphasis on legal terminology as applied in civil and criminal law.

Prerequisite(s): RTR 100 or RTR 105

Lab Fee: \$15

**RTR 125 Vocabulary/Reference Use (2)**

Techniques for using the dictionary, thesaurus, online references, prefixes, suffixes, synonyms, possessives and word pairs.

Prerequisite(s): DEV 061 or CPE 061

**RTR 131 Beginning Computer Assisted Transcription (3)**

Principles of transcript production using computer-aided transcription software (CATalyst4).

Prerequisite(s): RTR 105 or RTR 100

Lab Fee: \$25

**RTR 132 Advanced Computer Assisted Transcription (3)**

Advanced principles of transcript production using Case CATalyst4 computer-assisted translation software.

Prerequisite(s): RTR 131

Lab Fee: \$25

**RTR 150 Realtime Transcription (1)**

Supervised transcription of two, speed-dictation tests per week taken as prescribed in a concurrent speed course(s). Transcription must be completed within the 70 minutes immediately following the recorded dictation. Comparison of student transcript with hard copy of test dictation as a tool for reviewing vocabulary, grammar, spelling and punctuation as well as to analyze speed growth and accuracy.

Prerequisite(s): CPE 061

Lab Fee: \$15

**RTR 151 Realtime Transcription (1)**

Supervised transcription of one speed dictation test per week taken as prescribed in a concurrent speed course. The transcription must be completed within the 70 minutes immediately following the recorded dictation. Comparison of student transcript with a hard copy of test dictation as a tool for reviewing vocabulary, grammar, spelling and punctuation as well as to analyze speed growth and accuracy.

Prerequisite(s): DEV 061 or CPE 061 and RTR 105

Corequisite(s): RTR 107 or 108 OR RTR 111 or 112 OR RTR 201 or 202 or 203 OR RJR 211 or 212 or 213 OR RJR 231 or 232 or 233

Lab Fee: \$15

**RTR 152 Realtime Transcription (2)**

Supervised transcription of two speed dictation tests per week taken as prescribed in a concurrent speed course(s). The transcription must be completed within the 70 minutes immediately following the recorded dictation. Comparison of student transcript with a hard copy of test dictation as a tool for reviewing vocabulary, grammar, spelling and punctuation as well as to analyze speed growth and accuracy.

Prerequisite(s): DEV 061 or CPE 061 and RTR 105

Corequisite(s): RTR 107 OR two of the following: RTR 201/202/203 AND/OR RJR 211/212/213 AND/OR RJR 231/232/233

Lab Fee: \$15

**RTR 153 Realtime Transcription (3)**

Supervised transcription of three speed dictation tests per week taken as prescribed in a concurrent speed course(s). The transcription must be completed within the 70 minutes immediately following the recorded dictation. Comparison of student transcript with a hard copy of test dictation as a tool for reviewing vocabulary, grammar, spelling and punctuation as well as to analyze speed growth and accuracy.

Prerequisite(s): DEV 061 or CPE 061 and RTR 105

Corequisite(s): RTR 201 or 202 or 203 AND RJR 211 or 212 or 213 AND RJR 231 or 232 or 233

Lab Fee: \$15

**RTR 160 Realtime Skill Building (2)**

Additional speed development activities, including two additional assessments of speed and accuracy skill level per week. 70-minute transcription time. Analysis of transcription to determine quality practice needs for continual speed growth and for improved accuracy.

Prerequisite(s): RTR 105 or RTR 100

Lab Fee: \$36

**RTR 161 Realtime Skill Building (1)**

Additional speed-development activities, including one additional assessment of speed and accuracy skill level per week in conjunction with a concurrent realtime speed-development course. 70-minute transcription time. Analysis of transcription to determine quality practice needs for continual speed growth and for improved accuracy.

Prerequisite(s): RTR 108 or faculty permission

Corequisite(s): One RTR or RJR speed development course

Lab Fee: \$108

**RTR 162 Realtime Skill Building (2)**

Additional speed-development activities, including two additional assessments of speed and accuracy skill level per week in conjunction with two concurrent realtime speed-development courses. 70-minute transcription time. Analysis of transcription to determine quality practice needs for continual speed growth and for improved accuracy.

Prerequisite(s): RTR 108 or faculty permission

Corequisite(s): Two RTR or RJR speed development courses

Lab Fee: \$108

### **RTR 163 Realtime Skill Building (3)**

Additional speed-development activities, including three additional assessments of speed and accuracy skill level per week in conjunction with three concurrent realtime speed-development courses. 70-minute transcription time. Analysis of transcription to determine quality practice needs for continual speed growth and for improved accuracy.

Prerequisite(s): RTR 108 or faculty permission

Corequisite(s): Three RTR or RJR speed development courses

Lab Fee: \$108

### **RTR 201 Advanced Speed Building I (3)**

Development of writing skills in advanced literary dictation, including read-back and analysis of shorthand notes, proofreading skills and quality practice habits. This course encompasses speeds ranging from 100-150 wpm.

Prerequisite(s): RTR 108 or RTR 102

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RTR 202 Advanced Speed Building II (3)**

Continued development of writing skills in advanced literary dictation, including read-back and analysis of shorthand notes, proofreading skills and quality practice habits. The course encompasses speeds ranging from 120-160 wpm.

Prerequisite(s): RTR 201

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

### **RTR 203 Advanced Speed Building III (3)**

Continued development of writing skills in advanced literary dictation, including read-back and analysis of shorthand notes, proofreading skills, and quality practice habits. Successful completion of this course requires that the student demonstrate terminal speed skills of 180 wpm at 95 percent accuracy (Judicial) or 180 wpm at 96 percent accuracy (Captioning/CART). Must be completed within 12 months prior to graduation.

Prerequisite(s): RTR 202

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

## **(SOC) Sociology**

### **SOC 110 Sociology (3)**

Social theory, methodology and principles to provide a framework to study culture, socialization, stratification and deviance.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

### **SOC 140 Marriage and the Family (3)**

Historical and cross cultural examination of marriage and family practices.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

### **SOC 220 Comparing Cultures (3)**

The comparing and contrasting of several non-western world cultures with focus on family organizations, food-getting, social stratification, economics, religion, the arts and change.

Prerequisite(s): ENG 111 and SOC 110

Corequisite(s): ENG 112

### **SOC 230 Social Problems (3)**

This course will build on a general understanding of contemporary causes, treatment, and prevention of social problems within the United States. Students will advance and deepen the understanding of social problems and proposed solutions, through the lenses of three sociological theories and methodologies. Students will assess, debate and critically analyze proposed solutions to social problems from culturally diverse perspectives.

Prerequisite(s): SOC 110 and ENG 111

Corequisite(s): ENG 112

### **SOC 240 Racial and Cultural Minorities (3)**

Racial, ethnic, and religious diversity in the United States, focusing on a sociological examination of Afro-Americans, Native Americans, religious and regional minorities and women.

Prerequisite(s): ENG 111 and SOC 110

Corequisite(s): ENG 112

### **SOC 250 Sociology of Poverty: Feminization of Poverty (3)**

Examine the diverse nature of poverty within the United States from a variety of sociological perspectives. Poverty as it relates to stratification and social class, including historical trends of poverty, homelessness, families in poverty, feminization of poverty, racialization of poverty and proposed poverty reducing strategies.

Prerequisite(s): SOC 110 and ENG 111

## **(SPN) Spanish**

### **SPN 100 Survival Spanish I (3)**

Understanding and speaking in conversational settings at the beginning level, using knowledge of Spanish-speaking cultures. May not be taken for credit toward graduation if the student has completed SPN 111, 112, 113 or any other first or second-year Spanish course.

Prerequisite(s): CPE 061

### **SPN 102 Survival Spanish II (3)**

Continuation of SPN 100. Understanding and speaking in conversational settings at the early intermediate level. Acquiring oral skills and knowledge of Spanish speaking cultures at the intermediate low level. SPN 102 may be taken for graduation credit only if the student has not completed SPN 111, 112, 113 or any other Spanish course except SPN 100.

Prerequisite(s): SPN 100 or instructor permission

**SPN 111 Spanish I (4)**

Study of the vocabulary and structure of the Spanish language; practice in conversation, reading and writing.

Prerequisite(s): CPE 061 and CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

**SPN 112 Spanish II (4)**

Further study of the vocabulary and structure of the Spanish language; practice in conversation, reading and writing.

Prerequisite(s): SPN 111

**SPN 113 Spanish III (4)**

Further study of the vocabulary and structure of the Spanish language; practice in conversation, reading and writing.

Prerequisite(s): SPN 112 or SPN 120

**SPN 120 Review of Beginning Spanish (4)**

Intensive review of beginning-level Spanish vocabulary and structure. Course combines all vocabulary and present tense of Spanish 111 with all vocabulary and past verb tenses of Spanish 112. Practice in writing, reading, speaking and listening. Spanish is the primary language for the course.

Prerequisite(s): Students must NOT have previously taken SPN 111 or SPN 112 at CSCC within the past six years. Student must have some knowledge of basic Spanish to enter the course.

Corequisite(s): Knowledge equivalent to SPN 111 and SPN 112.

**SPN 211 Spanish IV (4)**

Grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.

Prerequisite(s): SPN 113

**SPN 212 Spanish V (4)**

Further grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.

Prerequisite(s): SPN 211

**(STT) Statistics****STT 264 Statistics I (4)**

Introduction to statistical techniques and methodology, including terminology, descriptive statistics, data analysis, data relationships, elementary set theory, elementary probability, random variables, probability distributions and contingency tables; with a laboratory exploration of probabilistic and statistical concepts, production of computer-generated data presentations, and compilation of routine statistical computations.

Prerequisite(s): CPE 101 or an appropriate score on the algebra placement test

Lab Fee: \$10

**STT 265 Statistics II (4)**

Application of statistical techniques and methodology, including sampling theory, estimation, design of experiments, correlation and regression, hypothesis testing and analysis of variance; with a computer laboratory exploration of statistical concepts, computation of statistical parameters and analysis of statistical significance.

Prerequisite(s): STT 264

Lab Fee: \$10

**STT 275 Business Statistics (4)**

Application of statistical methods to business problems; topics include both one and two sample statistical estimation and decision-making, chi-square analysis, the F distribution, one-way and two-way analysis and introduction to forecasting with regression models; use of computer programs in solving statistical problems.

Prerequisite(s): STT 264

Corequisite(s): STT 265

Lab Fee: \$10

**(SWK) Social Services****SWK 100 Introduction to Social Welfare and Social Work (4)**

Historical overview of social welfare policies and social work profession. Etiology of social problems of minorities and out-groups. Explore feelings, beliefs, values and readiness to make a commitment to social work.

Prerequisite(s): CPE 061 or appropriate Compass score

Corequisite(s): ENG 111

**SWK 105 Chemical Dependency I: Pharm/Physiology of Psychoactive Substances (4)**

Pharmacology of psychoactive substances including physiological and psychological effects and their propensity for addiction. Identification of basic treatment theories and treatment and prevention strategies in the field of addictions.

Prerequisite(s): CPE 061 or appropriate Compass score

**SWK 121 Social Work Methods and Procedures (5)**

Conceptual framework of generalist social work practice model. Creative problem solving, social work values, ethics and principles related to interventions with individuals, groups, organizations and communities. Exposure to differential theoretical perspectives.

Prerequisite(s): SWK 100, ENG 111, or instructor permission

Corequisite(s): ITS 103

**SWK 130 Social Policy and Services (4)**

Introduction to the social welfare policy process through history development and organization of social welfare and social work. Study evolution through contemporary and dated policy. Analyze and evaluate policy effectiveness. Effect of policy on population, particularly minorities. Understand forces that effect policy.

Prerequisite(s): SWK100, ENG 112, ENG 223, ITS 103 or instructor permission

**SWK 131 Social Policy and Services for Assoc. of Arts/  
Pre-SWK Majors (4.2)**

Introduction to the social welfare policy process through history development and organization of social welfare and social work. Study evolution through contemporary and dated policy. Analyze and evaluate policy effectiveness. Effect of policy on populations, particularly minorities. Understand forces that effect policy. Equivalent to SWK 130 with addition of 30 hour of field observation. Associate of Arts/Pre-Social Work degree majors interested in transferring into Wright State University's College of Social Work should take this course. Student may not take both SWK 130 and SWK 131 for credit toward graduation.

Prerequisite(s): SWK 100, ENG 112, ITS 103 or 12W or Instructor Permission

Student Liability Insurance: \$20

**SWK 136 Affective Education (4)**

This course is designed for Health and Human Services majors to develop intrapersonal and interpersonal communication skills. The emphasis is on personal growth and development

Prerequisite(s): SWK 100, ENG 111, ITS 103 or Instructor Permission

**SWK 205 Chemical Dependency II: Counseling  
Techniques (4)**

Theories of addiction including identifying treatment and prevention models and strategies. Counseling procedures and strategies with addicted populations, including concepts and practices of assessment, diagnosis and treatment planning.

Prerequisite(s): ENG 111, SWK 105 or permission of instructor

**SWK 217 Chemical Dependency III: Special  
Populations (4)**

Fundamental knowledge of issues in addiction treatments and prevention for various special populations. Identify effective counseling strategies in the treatment of addictions for populations including minorities, elderly, adolescents, infants, disabilities, corrections and dual-diagnosed individuals.

Prerequisite(s): SWK 205 or instructor permission

**SWK 218 Social Work and Mental Health (3)**

History of treating mental illness; application of abnormal psychology; assessing mental illness with Diagnostic Statistical Manual (DSM); psychotropic medications and critiquing the role of the social worker.

Prerequisite(s): SWK 121, PSY 230, or permission of instructor

**SWK 220 Social Service to Individuals with MR/DD (3)**

Social work practice serving individuals with mental retardation/developmental disabilities (MR/DD). Etiology, social, ethical and political issues, services in education, training and life skills.

Prerequisite(s): SWK 121 or instructor permission

**SWK 231 Generalist Practice/Crisis Intervention (3)**

Generalist social work practice model applied to crisis and short term intervention and problem solving with families and individuals.

Prerequisite(s): SWK 121 or instructor permission

**SWK 232 Generalist Practice with Family (3)**

Generalist social work practice model with emphasis on families, social worker role, planning, goal setting and evaluation within a generalist model of intervention.

Prerequisite(s): Pre-req for SWK majors: SWK 121. Pre-req for ECE majors ECE 102, SWK 136 or instructor permission

**SWK 236 Case Management (5)**

Overview and application of generalist practice skills to perform case management assessment, planning, and implementation with high risk populations. In addition to class attendance, complete the entire case management process with assigned client.

Prerequisite(s): SWK 121 or permission of instructor

**SWK 238 Social Work and Group Work (3)**

Overview of history and development of group work, professional ethics, curative factors, stages of group development, theories of change and effective leadership characteristics.

Prerequisite(s): SWK 121 or permission of instructor

**SWK 271 Social Services Practicum I (2)**

One hundred and sixty (160) hour placement in local social service agency under professional supervision, development of professional social work skills, integration of social work theories and skill based training and professional social work documentation. Prerequisite(s): SWK 121

Corequisite(s): SWK 291

Student Liability Insurance: \$20

**SWK 272 Social Service Practicum II (2)**

Continuation of SWK 271 with second 160-hour placement in local social service agency.

Prerequisite(s): SWK 121

Corequisite(s): SWK 292

**SWK 273 Social Service Practicum III (2)**

Continuation of SWK 272 with third 160-hour practicum in local social service agency.

Prerequisite(s): SWK 121

Corequisite(s): SWK 293

**SWK 291 Social Service Seminar I (2)**

This is the first of three courses designed to introduce and upgrade social work documentation skills. The course will also provide a forum for student shared learning and problem solving involving their practicum placements. Class assignments will integrate the practicum experience and social work theory in a classroom setting.

Prerequisite(s): SWK 121

Corequisite(s): SWK 271

**SWK 292 Social Work Seminar II (2)**

Continuation of SWK 291, documentation skills, social service field tours, agency guest speakers and student peer support.

Prerequisite(s): SWK 121

Corequisite(s): SWK 272

**SWK 293 Social Work Seminar III (2)**

Continuation of SWK 292, documentation skills, employability skills, ethical issues and student peer support.

Prerequisite(s): SWK 121

Corequisite(s): SWK 273

**SWK 297 Special Topics (3)**

Selected topic related to the practice of social work. Focus on topics will be on current trends, issues and social problems facing social workers and other social service professionals.

Prerequisite(s): None

## (THE) Theatre

**THE 105 Oral Interpretation of Literature (3)**

Introduction to the art of oral interpretation with emphasis on both poetry and prose.

Prerequisite(s): CPE 061

**THE 107 Speech & Voice for Actor (4)**

Basic training and practice in the actor's use of voice and speech with focus on techniques developed by Arthur Lessac.

Prerequisite(s): CPE 061

**THE 111 Stagecraft I (4)**

Focus on methods of scenery construction. Covers tools, materials, hardware, and basic approaches to building scenery using hands-on experience to complement lectures.

Prerequisite(s): CPE 061

Lab Fee: \$20

**THE 112 Stagecraft II (4)**

Continuation of Stagecraft I with special emphasis on construction of properties, scene painting techniques, special effects and installation.

Prerequisite(s): THE 111

Lab Fee: \$20

**THE 115 Props, Wardrobe, Stage Makeup (3)**

Focus on skills needed to work on props, wardrobe and makeup for the theatre.

Prerequisite(s): CPE 061

Lab Fee: \$25

**THE 130 Introduction to Theatre (3)**

The art of the theatre explored through the historical, literary and production perspectives.

Prerequisite(s): CPE 061

**THE 133 Script Analysis (3)**

Introduction to script analysis by identifying plot, structure, action, themes and application for the stage.

Prerequisite(s): CPE 061 and CPE 071

Corequisite(s): ENG 111

**THE 140 Movement for Actors (3)**

Movement principles for actors. Body alignment, weight transference, simple movements and movement combinations.

Prerequisite(s): None

**THE 150 Theatre Laboratory I (1)**

Lab experience in performance, design, production, or management. Arranged around student's schedule. Open to all students but meets graduation requirements only for AA in Performing Arts or Technical Theatre students (maximum 6 credit hours). May be repeated.

Prerequisite(s): CPE 061 & instructor permission

**THE 151 Theatre Laboratory II (2)**

Lab experience in performance, design, production or management. Arranged around student's schedule. Open to all students, but meets graduation requirements only for AA in Performing Arts or Technical Theatre students (maximum 6 credit hours). May be repeated.

Prerequisite(s): CPE 061 & instructor permission

**THE 152 Theatre Laboratory III (3)**

Lab experience in performance, design, production, or management. Arranged around student's schedule. Open to all students, but meets graduation requirements only for AA in Performing Arts or Technical Theatre students. (maximum 6 credit hours). May be repeated.

Prerequisite(s): CPE 061 & instructor permission

**THE 160 Acting for the Non-major (4)**

Introduction to the art of acting for the non-major. Focus on acquainting non-acting students with the concepts and theory taught to acting students. Includes introduction to script analysis, acting theory, principles of text and character scoring. Not for students who enroll in THE 202 and 203.

Prerequisite(s): CPE 061

**THE 166 Theatre Arts Tour (4)**

Survey and practical application of the touring process for high school audiences.

Prerequisite(s): DEV/CPE 061 & instructor permission

**THE 202 Acting I (4)**

Basic training and practice in vocal, physical and creative processes used by the actor. Not for students who have enrolled in THE 160.

Prerequisite(s): CPE 061

**THE 203 Acting II (4)**

Continuation of Acting I, THE 202, with more emphasis on character/role development and scoring techniques.

Prerequisite(s): THE 202

**THE 204 Acting III (4)**

Continuation of the study of acting techniques examined in Acting II, with additional emphasis on acting styles.

Prerequisite(s): THE 203

**THE 210 Lighting I (4)**

Study of stage lighting techniques, practices, and equipment. Includes electrical theory and use of dimming systems.

Prerequisite(s): CPE 061

**THE 211 Lighting II (4)**

Continuation of Lighting I with greater emphasis on design and hands-on experience.

Prerequisite(s): THE 210

**THE 220 Sound I (4)**

Theory and practices in sound reinforcement and effects for indoor and outdoor stage. Audio equipment and systems; recording techniques and operation of sound for performance.

Prerequisite(s): CPE 061

**THE 221 Sound II (4)**

Continuation of Sound I with more emphasis on hands-on experience.

Prerequisite(s): THE 220

**THE 230 Theatre Management (3)**

Operation of college, community, and professional theatre. Includes organization, personnel, budgets, accounting, ticket sales, publicity and general procedures of house management.

Prerequisite(s): CPE 061

**THE 235 Stage Management (3)**

Introduction to the duties and responsibilities of the stage manager. Includes documentation preparation for rehearsals and performances, and the development of organizational and interpersonal skills necessary to function successfully in a stage management capacity.

Prerequisite(s): CPE 061

**THE 240 Basics of Theatre Design (4)**

Preliminary concepts of stage, lighting, sound, and costume design. Covers history of theatrical presentation and motivation for design concepts.

Prerequisite(s): THE 211, THE 221, THE 270, THE 271

**THE 241 Theatre History I (3)**

Survey of the history and development of theatrical production from Ancient Greece through Medieval Europe. Emphasis on play production rather than literature. Representative plays studied.

Prerequisite(s): DEV/CPE 061

Corequisite(s): ENG 112

**THE 242 Theatre History II (3)**

Survey of the history of theatrical production from the Renaissance through the eighteenth century. Emphasis on play production rather than literature. Representative plays studied.

Prerequisite(s): DEV/CPE 061

Corequisite(s): ENG 112

**THE 243 Theatre History III (3)**

Survey of the history of theatrical production from the Eighteenth Century through the present. Emphasis on play production rather than literature. Representative plays studied.

Prerequisite(s): DEV/CPE 061 and CPE 071 or appropriate Compass score.

Corequisite(s): ENG 111

**THE 280 Directing I (4)**

Introduction to the art and techniques of directing for the stage, including visual story-telling, script analysis and working with actors.

Prerequisite(s): THE 111 or THE 202

**THE 285 Co-op Education I (3)**

The opportunity to relate studies to the world of work. Familiarity with a career in technical theater and application of the principles and theories learned in classroom experiences.

Prerequisite(s): EBE 100 and approved co-op placement

THE 286 Co-op Education II (3)

Valuable work experience. Continuation of Co-op Education I; an academic project is required.

Prerequisite(s): THE 285

**THE 287 Co-op Education III (3)**

Valuable work experience. Continuation of Co-op Education II; a more extensive academic project is required.

Prerequisite(s): THE 286

**THE 288 Co-op Education IV (1)**

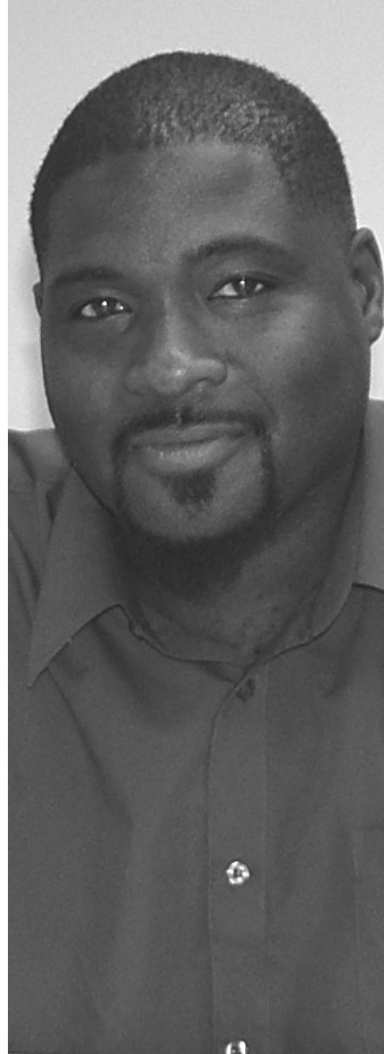
Continuation of work experience, including an extensive academic project is required.

Prerequisite(s): THE 285

**THE 289 Co-op Education V (2)**

Continuation of work experience, including an academic project is required.

Prerequisite(s): THE 285



# Campus Directory

2008  
2009

Want to know who's who at Clark State? Our Campus Directory will introduce you to all of the faculty and staff who are here to help you realize your college dreams.



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