

## **Quarter Calendars**

Dec. 3

Fall Quarter ends

Summer C	Quarter <b>2005</b> June 20-Aug. 26, 2005	Winter Q	uarter <b>2006</b> Jan. 3-Mar. 18, 2006	
May 16 Open registration begins		Nov. 7-14	Priority registration-Students currently enrolled	
June 10	Last day to pay without late fee for students		Fall Quarter 2005	
	enrolled in Summer Quarter	Nov. 15	Open registration begins	
June 13	Mature Citizens registration begins	Dec. 2	Last day to pay without late fees for students	
June 15	Last day to pay for Summer terms A, C, D		enrolled in Winter Quarter	
June 17	General registration 9 a.m. to 12 noon, Records	Dec. 7	Last day to pay fees for Winter Quarter	
	Office, Rhodes Hall	Dec. 9	General registration – 8:30 a.m. to 5 p.m.	
June 18	Registration and payment: 9 a.m. to 12 noon		Records Office, Rhodes Hall	
June 20	Summer A, C, D terms begin	Dec. 23-26	College Closed Christmas Holiday	
July 4	College Closed for Independence Day	Dec. 27	Mature Citizens registration begins	
July 8	Last day to drop with a "W" for Summer A	Jan. 2	College Closed – New Year's Day Holiday	
July 15	Last day to drop with a "W" for Summer C	Jan. 3	Winter Quarter begins	
July 22	Summer A ends	Jan. 16	College Closed – Martin Luther King Day	
	Last day to pay for Summer B	Feb. 6-11	Midterm week	
	Last day to drop with a "W" for Summer D	Feb. 17	Last day to drop with a "W" for Winter Quarter	
July 25	Summer B term begins	Mar. 14-18	Final exams	
Aug. 12	Last day to drop with a "W" for Summer B	Mar. 18	Winter Quarter ends	
	Summer C term ends		•	
Aug. 26	Summer B and D terms end			

Fall Quarter 2005 Sept. 12-Dec. 3, 2005			Spring Quarter 2006 Mar. 27-June 9, 2006		
May 16	Open registration l	pegins	Feb. 13-17	Priority registration	n-Students currently enrolled
Aug. 25	Last day to pay wit	hout late fee for students		Winter Quarter 20	06
	enrolled in Fall Qu	arter	Feb. 20	Open registration	begins
Aug. 31	Last day to pay fee Quarter	s for students enrolled in Fall	Mar. 10	Last day to pay wir enrolled Spring Qu	thout late fee for students
Sept. 2	General registration	n 8:30 a.m. to 5 p.m.	Mar. 15	1 0 .	students enrolled in
	Records Office, Rh	odes Hall		Spring Quarter	
Sept. 5	College Closed – L	abor Day	Mar. 17		n 8:30 a.m. – 5 p.m.
Sept. 6	Mature Citizens reg	gistration begins		Records Office, Rh	_
Sept. 10	Registration and pa	ayment: 9 a.m. – 12 noon	Mar. 20	Mature Citizens re	
Sept. 12	Fall Quarter begins	S	Mar. 25		ayment 9 a.m. – 12 noon
Oct. 22	Midterm week		Mar. 27	Spring Quarter beg	v
Oct. 28	Last day to drop w	ith a "W" for Fall Quarter	May 1-6	Midterm week	
Nov. 11	College Closed – V	eterans Day	May 12		rith a "W" for Spring Quarter
Nov. 22-23	Faculty/Staff Devel College Open	opment Day – No Classes –	May 29	College Closed – N	Memorial Day
Nov. 24	College Closed for	Thanksgiving Holiday	June 6-9		rday classes exam is June 4)
Nov. 25	College Closed		June 9	Spring Quarter en	ds
Nov. 28	Faculty Activity Da	ny – College Open	June 10	Graduation	
Nov. 29-	Final Exams				
Dec. 3					

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## **Welcome to Clark State**



Dear Students,

I would like to extend a personal welcome to each of you, and offer my congratulations for choosing Clark State Community College as *your* community college! Your future will benefit greatly by the rewards you gain through higher learning.

Clark State Community College is leading the way in higher education. Our growing number of program opportunities lead to rewarding, high paying careers that are in demand by local, regional and national companies that recognize the need for trained, educated employees. The College offers more than 50 associate degrees and certificates, and the first two years of a bachelor's degree. And our faculty are among the most qualified instructors and professors in the state.

Most importantly, Clark State is an affordable educational opportunity. Our tuition is still one of the lowest you'll find in the area, and a full-time student can attend Clark State for only about \$3,100 per year! It's no wonder that we have more students enrolled now than at any other time in our history.

At Clark State, you'll be welcomed by a new family of faculty, students and employees who support one another, have fun together and enjoy college life. And because our student body is extremely diverse, you'll realize that some of your best educational experiences will come from sharing thoughts and building relationships with others you'll meet along your journey.

Your Clark State Catalog is designed to assist you in learning more about the College, our policies and your course of study. You'll also find out more about student services and the activities available on campus. You may also access this catalog online at www.clarkstate.edu.

I wish you the best as you begin your pathway to the future. Good luck at Clark State!

Best regards,

Jaren E. Kafinski Karen E. Rafinski, Ph.D. President

Volume XXXV June 2005

This Catalog was prepared prior to the 2005-2006 academic year for informational purposes only. The educational programs are changed whenever it is necessary 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.

The College has as its objective the equal employment and treatment of all individuals without regard to race, color, religion, sex, national origin, age, disability, political affiliation, veteran status or other non job-related factors.

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 reexamined 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 the humanities and the 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 Statement

Opportunity without boundaries, learning without end, achievement without limits

#### Mission Statement

The purpose of Clark State Community College is to foster individual and community prosperity through access to the highest quality, learner-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 goes on 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 two campuses to serve you. 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 also offers classes at other locations in the community. These classes are included in our quarterly class schedule.

#### Distance or Online Learning

Distance or 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. Courses offered in this format do not alter the course content or the expected student learning outcomes. The only significant difference is in the method of instructional delivery. Currently, the College supports several instructional formats: directed learning, online, self-paced, and webenhanced. Clark State offers over 130 online credit courses to learners throughout its service area.

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.

Distance or online courses are taught by experts in their disciplines and, depending on the course, are available in a variety of delivery formats.

### 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 program is 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, 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, 614-466-0388 or online at www.nursing.ohio.gov and accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006. Telephone: 1-800-669-1656, extension 153, or online at 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, Ohio, 43215-7410, 614-466-0388 or online at 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. 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, Telephone 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.

## **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
Turf and Landscape Operations Option	AAS

#### **Business Technologies**

Accounting Technology	AAB
Broadcast Captioning/CART Option	AAB
Computer Networking Option	AAB
Advanced Computer Networking Option	AAB
Technical Systems Support Option	AAB

	Computer Software Development	AAB	Medical Coding Certificate
	Graphic Design Technology	AAB	Medical Transcription Certificate
1	Judicial Reporting	AAB	Microsoft Database Administration/Networking
	Legal Assisting (1st year)		Certificate
,	Management Technology	AAB	Microsoft Database Administration/Programming
	Logistics and Supply Chain Management Option	AAB	Certificate
	Marketing and E-Business Option	AAB	Network Administration Certificate
1	Office Administration Technologies		Network Infrastructure Certificate
1	Medical Office Administration	AAB	Nurse Aide Training Certificate
	Office Administration	AAB	Oracle Database Management Certificate
			Paramedic Certification
	Engineering Technologies		Paramedic Certification for RN
	CAD Drafting Technology	AAS	Security Wireless Certificate
	Engineering Transfer	AAS	Small Business Certificate
	Industrial Technology	AAS	Supervisory Certificate
	Manufacturing Engineering Technology	AAS	Systems Analysis Certificate
	0 0 0		Technical Support Certificate
	Health and Human Services Technologies		Theatre Arts Administration Certificate
	Early Childhood Education	AAS	Web Services Certificate
	Early Childhood Education		
	Administration Option	AAS	Associate of Technical Studies
	Early Elementary Paraprofessional	AAS	Clark State also offers an Associate of Technical S
	Emergency Medical Services/Paramedic		degree if your career needs are not met by one
	Technology	AAS	technical degree programs. The flexibility of this pr
	Medical Laboratory Technology	AAS	permits you to work with an advisor to constr

AAS

nnical Studies y one of our this program construct an interdisciplinary 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 divisional administrator.

An Associate of Technical Studies program must contain at least 21 credit hours of basic courses, 23 credit hours of non-technical courses. 45 credit hours of 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.

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** Corrections Technology AAS

#### **Certificate Programs**

Accounting Computer-Aided Design Certificate Electrical Maintenance Certificate Electronics Certificate Management Certificate Manufacturing Certificate Photography Practical Nursing Certificate

Criminal Justice Technology

#### **Departmental Certificates**

Chemical Dependency Communications Certificate Computer Software Development/Programming Certificate Customer Service Certificate Early Literacy Development Certificate Early Childhood Administration Certificate **EMT-Basic Certification** EMT-Intermediate Certification Logistics and Supply Chain Management Certificate Machine Transcription Certificate Marketing E-Business Certificate

The Assessment Committee has established tools by which the CORE is assessed and how the results of the assessment 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		
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		
Humanities			

	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 (GA)
COM 121	Effective Speaking
ENG 130	Introduction to Literature (GA)
ENG 225	Creative Writing
ENG 230	Great Books: Literature (GA)

ENC 941	Doctory (CA)
ENG 241 ENG 243	Poetry (GA)
ENG 245	Fiction (GA)
ENG 245 ENG 250	Drama (GA)
ENG 250 ENG 261	American Literature
	British Literature to 1700 (GA)
ENG 262	British Literature 1700-present (GA)
HON 291	Science & Religion
HST 111	Western Civilization through
HCT 110	the 14th Century (GA)
HST 112	Western Civilization from
HCT 110	the 14th through the 18th Century (GA)
HST 113	Western Civilization from the
LICT 101	19th Century to the Present (GA)
HST 121	American History to 1810
HST 122	American History 1810-1900
HST 123	American History 1900-Present (GA)
HST 220	Topics in African-American History and
111111 000	Culture (GA)
HUM 299	Capstone Seminar
MUS 130	Music Appreciation (GA)
PHL 110	Problems in Philosophy (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
THE 105	Oral Interpretation of Literature
THE 130	Introduction to Theatre (GA)
THE 270	Theatre History I (GA)
THE 271	Theatre History II (GA)
*FCO 110 car	nnot he used as a general education

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

## **Transfer Degrees**

You can complete the first two years of a baccalaureate degree at Clark State and then transfer to a four-year college or university to complete the last two years. Clark State has developed university parallel transfer degrees through articulation agreements with most four-year colleges and universities in the area. The transfer degrees are the Associate of Arts (AA) and Associate of Science (AS).

The primary purpose of these associate degrees is to provide transfer credit to four-year colleges and universities. You can transfer successfully to other institutions in areas such as business, psychology, English, theatre, urban affairs, art, agriculture, engineering sciences, engineering technologies and others.

More than half of our 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.

In addition, we offer many activities, such as student government, intercollegiate sports, honors programs, and various support services, such as financial aid and scholarships, counseling and tutoring services.

We have more than 75 curriculum guides available to help you plan your course of study at Clark State and to maximize the transferability of your classes to other institutions.

Clark State Community College has transfer agreements with the following four-year institutions:

Antioch University and the McGregor School of Antioch Capital University

Central State University

DeVry Institute of Technology

Franklin University and Franklin University Alliance Programs

Miami University, College of Applied Science

The Ohio State University

University of Dayton, General Education

Requirements and Engineering Technology Department

University of Phoenix

University of Toledo

Urbana University

Wilberforce University

Wittenberg University

Wright State University

(Course equivalents exist with Columbus State, Miami University, Ohio University, and University of Toledo.)

#### Policy of Statewide Articulation Agreement -Institutional Transfer

The Ohio Board of Regents, following the directive of the Ohio General Assembly, has developed a statewide policy to facilitate movement of students and transfer of credits from one Ohio public college or university to another. The purpose of the state policy is to avoid duplication of course requirements and to enhance student mobility throughout Ohio's higher education system. Since independent colleges and universities in Ohio may or may not be participating in the transfer policy, students interested in transferring to an independent institution are encouraged to check with that college or university regarding transfer agreements.

Clark State Community College is a member of Ohio's Course Applicability System (CAS). Information about whether Clark State Community College's credit hours will apply at many other Ohio colleges and universities, and vice versa, may be found by accessing CAS at http://miami.transfer.org/cas/index.jsp.

#### Planning/Student Responsibilities

If you are seeking an AA or AS degree, you should plan your program at Clark State according to the requirements of the transfer institution. If you begin your academic career at Clark State in an Applied Business or Applied Science (AAB or AAS) degree program, you may not receive transfer credit for many of the technical courses within those programs, either for the AA/AS at Clark State or for a major at a four-year college or university.

Here are specific guidelines of student responsibilities to assure maximum transferability of credits:

- You need to determine the four-year college or university to which you will transfer and your prospective major as early as possible in your academic program.
- You should 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.
- You will need a minimum of 90 credit hours that clearly meet Clark State's degree requirements to graduate with an AA or AS.
- It is your responsibility to work with an advisor and sign up for appropriate courses each quarter.

#### Transfer Module

The Ohio Board of Regents Transfer and Articulation Policy established the Transfer Module, which is a specific subset or the entire set of a college or university's general education requirements. The Transfer Module contains 54-60 quarter hours\* or 36-40 semester hours of specified course credits in English composition, mathematics, communications, fine arts, humanities, social science, behavioral science, natural science, physical science and interdisciplinary coursework.

A Transfer Module completed at one college or university
will automatically meet the requirements of the Transfer
Module at the receiving institution once you are accepted.
You may be required, however, to meet additional general
education requirements that are not included in the
Transfer Module.

\*The Transfer Module refers to credit hours as quarter hours.

#### Conditions for Transfer Admission

Students meeting the requirements of the Transfer Module are subject to the following conditions:

- The policy encourages receiving institutions to give preferential consideration for admission if you complete the Transfer Module and either the Associate of Arts or the Associate of Science degrees. You will be able to transfer all courses in which you received a passing grade of "C" or better. You must have an overall grade point average of 2.0 to be given credit for the Transfer Module.
- The policy also encourages receiving institutions to give preferential consideration for admission if you complete the Transfer Module with a "C" or better in each course

and 90 quarter hours or 60 semester hours. You must have an overall grade point average of 2.0 to be given credit for the Transfer Module, and only courses in which a "C" or better has been earned will transfer.

- The policy encourages receiving institutions to admit on a non-preferential consideration basis students who complete the Transfer Module with a grade of "C" or better in each course and fewer than 90 quarter hours or 60 semester hours. You will be able to transfer all courses with grade of "C" or better.
- Admission to an institution, however, does not guarantee
  that a transfer student will be automatically admitted to
  all majors, minors or fields of concentration at that
  institution. Once admitted, you follow the same regulations
  governing applicability of catalog requirements as all
  other students, such as higher GPAs required for admission
  into specific colleges or programs. Furthermore, transfer
  students have the same class standing and other privileges
  as native students on the basis of the number of credits
  earned. All residency requirements must be successfully
  completed at the receiving institution prior to the granting
  of a degree.

### **Transfer Appeals Process**

If you disagree with the application of transfer credit by the receiving institution, you have the right to appeal the decision. Each institution is required to make its appeals process available to you.

If your appeal is denied by the institution after all appeal levels within the institution have been exhausted, the college will advise you in writing of the availability and process of appeal to the state level Articulation and Transfer Appeals Review Committee.

The Appeals Review Committee will review and recommend to institutions 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.

See Transfer Credits on page 132 for Clark State's policy on the transfer and appeals process.

## **Transfer Module**

The Transfer Module consists of 54 quarter hours of introductory courses in the following listing. You should follow the directions when selecting courses for the Transfer Module:

- 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	Effective Speaking	3
ENG 111	English I	4
ENG 112	English II	4
ENG 221	<b>Business Communications</b>	3
ENG 223	Technical Report Writing	3
ENG 225	Creative Writing	3
ENG 227	Intermediate Composition	3

#### Mathematics

Complete a minimum of three quarter hours chosen from:

11 0111.		
MTH 105	Mathematics and Today's World	3
MTH 120	College Algebra A	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: Literature	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 270	Theatre History I	4
THE 271	Theatre History II	4

Category B			BIO 110	Fundamentals of Human Biology	4
HST 111	Western Civilization	3	BIO 111	Biology I	4
	through the 14th Century	3	BIO 112	Biology II	4
HST 112	Western Civilization from		BIO 113	Biology III	4
	the 14th though the 18th Century	3			
HST 113	Western Civilization from		*BIO 121	Anatomy & Physiology I	4
	the 19th Century to the Present	3	BIO 122	Anatomy & Physiology II	4
HST 121	American History to 1810	3	BIO 123	Anatomy & Physiology III	4
HST 122	American History 1810-1900	3			
HST 123	American History 1900-Present	3	BIO 131	Microbiology	4
PHL 110	Problems in Philosophy	3	BIO 140	Plant Science	4
PHL 200	Critical Thinking				
PHL 205	Deductive Logic	3	CHM 110	Fundamentals of Chemistry	5
PHL 210	Ethics	3	CHM 114	Intro to General Chemistry Review	4
PHL 220	Business Ethics	3			
PHL 230	Medical Ethics	3		Intro to General Chemistry	5
PHL 240	Philosophy of World Religions	3		Intro to Organic Chemistry	5
PHL 250	Great Books: Philosophy	3		General Chemistry I	5 5
				General Chemistry II	5
Social and Be	ehavioral Sciences		CHM 123	General Chemistry III	5
Complete n	ine quarter hours chosen from at least two				
	bject areas from among the following:			Organic Chemistry I	5
				Organic Chemistry II	5
ECO 110	General Economics	3	CHM 213	Organic Chemistry III	5
ECO 221	Principles of Macroeconomics	3			
ECO 222	Principles of Microeconomics	3	*GLG 111		4
GEO 110	World Human Geography	3		Geology II	4
GEO 220	World Regional Geography	3		Geology III	4
PLS 110	American National Government	3	GLG 121	Meteorology	4
PLS 120	American Issues	3		- 1 1 1 1 1 1 1 1 1	
PLS 130	Political Issues	3	PHY 105	Fundamentals of Scientific Methods	3
PLS 220	Constitutional Law	3		- 1 A-21	_
PSY 111	Psychology I	3		Fundamentals of Physics	5
PSY 112	Psychology II	3		Technical Physics I	4
PSY 221	Human Growth & Development I	3		Technical Physics II	4
PSY 222	Human Growth & Development II	3	PHY 113	Technical Physics III	4
D G T T . G G G			DUV TON	Astronomy	1

3

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3

PHY 120 Astronomy

PHY 251 General Physics II

PHY 252 General Physics III

\*PHY 250

General Physics I

4

6

5

5

#### Natural and Physical Sciences

Sociology

PSY 230

RST 260

RST 262

RST 270

RST 280

SOC 110

SOC 140

SOC 220

SOC 230

SOC 240

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

Racial and Cultural Minorities

Abnormal Psychology

Regional Studies: China

Regional Studies: India

Regional Studies: Africa

Marriage and Family

Comparing Cultures

Social Problems

Regional Studies: Latin America



Clark State offers over 50 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.

Clark State Community College GET SMART.

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# Accounting Technology

Accountants compile and analyze business transactions and prepare financial reports such as income statements, balance sheets, statement of cash flows, 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 102, Keyboarding/Word Processing.

The program schedule that follows is designed for fulltime 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 degree in Accounting, a graduate will be able to:

- perform basic accounting functions in an established accounting system to the satisfaction of an employer.
- 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 entitles.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number	Course Title	Credit Hours
Fall ACC 111 COM 121 ENG 111 ITS 103 MGT 105	Principles of Accounting I Effective Speaking English I Information Technology Basics Introduction to Business	4 3 4 3 3
Winter ACC 112 ENG 112 ENG 135 ITS 12S MGT 112 MGT 260	Principles of Accounting II English II or Business Report Writing* Beginning Spreadsheet Principles of Business Management Business Law	4 4 1 4 3
Spring ACC 113 ACC 120 ENG 221 MTH 106	Principles of Accounting III Microcomputer Accounting Systems Business Communications Business Mathematics Social Science Elective***	4 4 3 3 3
Fall ACC 205 ACC 211 ACC 221 ITS 12D MGT 266	Spreadsheet Accounting Intermediate Accounting I Tax Accounting I Beginning Database Quantitative Business Methods	4 4 4 1 4
Winter ACC 212 ACC 222 ECO 221 MGT 270	Intermediate Accounting II Tax Accounting II Principles of Macroeconomics Business Finance** Humanities/Social Science Elective**	4 4 3 4 ** 3
Spring ACC 213 ACC 233 ACC 250 ECO 222	Intermediate Accounting III Cost Accounting Government and Non-Profit Account Principles of Microeconomics Humanities/Social Science Elective**	3
	Total credit hours	103

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

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

<sup>\*\*\*</sup>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.

## **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 102, Keyboarding/Word Processing.

The program schedule that follows is designed for fulltime 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 Number	Course Title	Credit Hours
ACC 111 ACC - ENG 111 ITS 103 MGT 105	Principles of Accounting I Accounting Elective* English I Information Technology Basics Introduction to Business	4 4 4 3 3
Winter ACC 112 COM 121 ENG 112 ENG 135 ITS 12S MGT 260	Principles of Accounting II Effective Speaking English II or Business Report Writing** Beginning Spreadsheet Business Law	4 3 4 1 3
Spring ACC 113 ACC 120 ACC 205 ENG 221 MTH 106	Principles of Accounting III Microcomputer Accounting Systems Spreadsheet Accounting Business Communications Business Mathematics	4 4 4 3 3
	Total credit hours	51

<sup>\*</sup>Any accounting course not already prescribed.

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

# Agriculture Technologies 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 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 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.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number		redit Iours
AGR 150 AGR - ENG 111 ENT 121	Agricultural Survey and Employment Skills Soil Science Ag/Hort Elective* English I Computer Basics for Applied Technology	3 4 3 4 7 3
Winter AGR 108 AGR 151 BIO 140 ENG 112	Technical Math for Agriculture Soil Fertility Plant Science English II Social Science Elective	3 4 4 4 3
Spring AGR 194	Agribusiness Co-op Experience I	4
Summer AGR 109 COM 121	Animal Agriculture Effective Speaking	4 3
AGR 122 AGR 174 AGR 214 ACC 111	Plant Pests Agribusiness Principles Crop Production Principles of Accounting I Humanities/Social Science Elective (GA	4 3 4 4 A) 3
Winter AGR 105 AGR 253 AGR 284 AGR - ENG 223	Principles of Ag Sales I Pest Management Agribusiness Management Ag/Hort Elective* Technical Report Writing	3 5 4 3 3
Spring AGR 106 AGR 206 AGR 262 AGR 295	Ag Sales II Agribusiness Marketing International Ag Trade Agriculture Capstone Seminar	3 3 3 3
ECO -ECO	110 or ECO 221 or ECO 222 Humanities/Social Science Elective	3
	Total credit hours	100

<sup>\*</sup>Ag/Hort electives may be any AGR course not required in the program. Suggested Ag/Hort electives include: AGR 185, Vehicle Operations and Management (strongly recommended); AGR 115, Welding; INT 120, Hydraulic/Pneumatics I; or INT 150, Electrical Systems. Other coursework may be approved by the division.

## Agricultural Engineering Technologies 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 Number	Course Title	Credit Hours
Fall AGR 104	Agricultural Survey and Employment Skills	3
AGR 187	Small Gas Engines	4
AGR 150	Soil Science	4
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technolo	gy 3
Winter AGR 108	Technical Math for Agriculture	3
AGR 100	Welding	3
ENG 112	English II	4
AGR 151	Soil Fertility	4
COM 121	Effective Speaking	3
Spring AGR 224	Irrigation Systems	3
AGR 219	Landscape Construction	4
ENT 205	Circuits and Machines	4
	Humanities/Social Science Elective (C	GA) 3
Summer AGR 194	Agribusiness Co-op Experience	4
r II		
Fall AGR 174	Agribusiness Principles	3
AGR 225	Landscape Maintenance	4
AGR -	Ag/Hort Elective	3
INT 120	Hydraulics/Pneumatics I	4
ENG 223	Technical Report Writing	3
Winter AGR 105	Dringiples of Ag Sales I	3
AGR 103 AGR 284	Principles of Ag Sales I Agribusiness Management	4
AGR -	Ag/Hort Elective	3
INT 125	Hydraulic/Pneumatics II	4
INT 170	Mechanical Maintenance	4
Spring	Ag Calog II	9
AGR 106 AGR 295	Ag Sales II Agriculture Capstone Seminar	3
	AGR or INT Elective	3
	Social Science Elective	3
	Humanities/Social Science Elective	3
	T-4-1 1:4 h	100

<sup>\*</sup>Ag/Hort or INT elective may be any AGR or INT course not required in the program. Suggested Ag/Hort or INT electives include: AGR 185, Vehicle Operations and Management; AGR 226, Landscape Design; or INT 150, Electrical Systems. Other course work may be approved by the division.

103

Total credit hours

#### 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, 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 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 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.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

## 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 Number		edit ours
AGR 133 AGR 150 AGR 187 ENG 111	Agricultural Survey and Employment Skills Turf Science Soil Science Small Gas Engines English I	3 3 4 4 4
Winter AGR 108 AGR 151 BIO 140 ENG 112 ENT 121	Technical Math for Agriculture Soil Fertility Plant Science English II Computer Basics for Applied Technology	3 4 4 4 3
Spring AGR 193 AGR 224	Horticulture Co-op Experience I Irrigation Systems Humanities/Social Science Elective	3 3 3
Summer AGR 293 COM 121	Horticulture Co-op Experience II Effective Speaking Humanities/Social Science Elective (GA	3 3 ) 3
AGR 122 AGR 143 AGR 174 AGR 225 AGR 236	Plant Pests Landscape Plant Materials Agribusiness Principles Landscape Maintenance Turfgrass Management	4 4 3 4 3
Winter AGR 253 AGR 284 AGR - ACC 111	Pest Management Agribusiness Management Ag/Hort Elective* Principles of Accounting I	5 4 3 4
Spring AGR 145 AGR 219 AGR 295 ENG 223	Herbaceous Plant Materials Landscape Construction Agriculture Capstone Seminar Technical Report Writing Social Science Elective	4 4 3 3 3
	Total credit hours 1	05

<sup>\*</sup>Ag/Hort electives may be any AGR course not required in the program. Suggested Ag/Hort electives include: AGR 105, Principles of Ag Sales I; AGR 115, Welding; AGR 226, Landscape Design; INT 120, Hydraulics/Pneumatics I; or INT 150, Electrical Systems. Other course work may be approved by the division.

## Landscape Design Option

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

Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours
Fall AGR 104	Agricultural Survey and		Fall AGR 104	Agricultural Survey and	
	Employment Skills	3		Employment Skills	3
AGR 143	Landscape Plant Materials	4	AGR 143	Landscape Plant Materials	4
AGR 150	Soil Science	4	AGR 150	Soil Science	4
DFT 101	Drafting I	3	ENG 111	English I	4
ENG 111	English I	4	ENT 121	Computer Basics for Applied Technolog	gy 3
Winter			Winter		
AGR 108	Technical Math for Agriculture	3	AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4	AGR 151	Soil Fertility	4
AGR 226	Landscape Design I	4	AGR 226	Landscape Design I	4
BIO 140	Plant Science	4	BIO 140	Plant Science	4
ENT 121	Computer Basics for Applied Technological	gy 3			
			Spring	II. b Dl M l.	4
Spring	TI I DI LIVE AL		AGR 145	Herbaceous Plant Materials	4
AGR 145	Herbaceous Plant Materials	4	AGR 193	Horticulture Co-op Experience I	3
AGR 193	Horticulture Co-op Experience I	3	ENG 112	English II	4
ENG 112	English II	4	Summer		
C			AGR 293	Horticulture Co-op Experience II	3
Summer AGR 293	Harticultura Co on Experience II	9	AGR 233	Humanities/Social Science Elective (GA	
AGR 293	Horticulture Co-op Experience II Humanities/Social Science Elective (G.	3 A) 3		Trumamiles/Bocial Science Licetive (G/	1) 0
	Trumamities/Social Science Elective (G.	A) 3	Fall		
Fall			AGR 122	Plant Pests	4
AGR 122	Plant Pests	4	AGR 174	Agribusiness Principles	3
AGR 174	Agribusiness Principles	3	AGR 225	Landscape Maintenance	4
AGR 225	Landscape Maintenance	4	ACC 111	Principles of Accounting I	4
DFT 211	Computer Aided Design	4	COM 121	Effective Speaking	3
	r				
Winter		0	Winter	Duin ainle of A of Color I	0
AGR 105	Principles of Ag Sales I	3	AGR 105	Principles of Ag Sales I	3
AGR 284	Agribusiness Management	4	AGR 231 AGR 253	Plant Propagation	4
AGR 297	Landscape Design II	4	AGR 284	Pest Management	5 4
COM 121	Effective Speaking	3		Agribusiness Management	3
ENG 223	Technical Report Writing	3	AGR -	Ag/Hort Elective*	3
Spring			Spring		
AGR 219	Landscape Construction	4	AGR 219	Landscape Construction	4
AGR 287	Computer Aided Landscape Design	4	AGR 295	Agriculture Capstone Seminar	3
AGR 295	Agriculture Capstone Seminar	3	ENG 223	Technical Report Writing	3
	Social Science Elective	3		Social Science Elective	3
	Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Total credit hours	102		Total credit hours	103

**Nursery Operations Option** 

Landscape plant materials, landscape installation and land-

scape plant production are areas emphasized leading to careers in the garden center and nursery industries.

<sup>\*</sup>Ag/Hort electives may be any AGR course not required in the program. Suggested Ag/Hort electives include: AGR 224, Irrigation Systems; AGR 297, Landscape Design II; or INT 150, Electrical Systems. Other course work may be approved by the division.

## 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 Number	Course Title	Credit Hours
Fall AGR 104	Agricultural Survey and Employment Skills	3
AGR 133 AGR 150	Turf Science Soil Science	3 4
ENG 111 ENT 121	English I	4
Winter AGR 108	Technical Math for Agriculture	3
AGR 151	Soil Fertility	4
BIO 140 COM 121	Plant Science	4 3
ENG 112	Effective Speaking English II	4
Spring		
AGR 145	Herbaceous Plant Materials	4
AGR 193	Horticulture Co-op Experience I	3
Summer		
AGR 293	Horticulture Co-op Experience II Humanities/Social Science Elective (	3 (GA) 3
	Tidanamicos, Social Social Social Discourse (	(3.11)
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	Dringinles of Ag Cales I	9
AGR 105 AGR 253	Principles of Ag Sales I Pest Management	3 5
AGR 284	Agribusiness Management	4
AGR -	Ag/Hort Elective*	3
ENG 223	Technical Report Writing	3
Spring AGR 219	Landscapa Construction	1
AGR 219 AGR 295	Landscape Construction Agriculture Capstone Seminar	4
ACC 111	Principles of Accounting I	4
	Social Science Elective	3
	Humanities/Social Science Elective	3
	Total credit hours	101

\*Ag/Hort electives may be any AGR course not required in the program. Suggested Ag/Hort electives include: AGR 115, Welding; AGR 185, Vehicle Operations and Management; AGR 224, Irrigation Systems; AGR 226, Landscape Design; INT 120, Hydraulics/Pneumatics I; or INT 150, Electrical Systems. Other course work may be approved by the division.

## **Associate of Arts**

Four-year colleges and universities generally require that students spend a significant portion of their first two years taking general education courses that build their knowledge and skills in general education. These undergraduate courses are primarily those that a student seeking an AA or AS degree takes at Clark State and then transfers to the institution of his/her choice. Of the 90 credit hours necessary to achieve an AA or AS degree, a minimum of 59 must be in areas 1-6 in the outline of degree requirements.

The remaining credit hours are divided among the Capstone, concentration and electives. Capstone is for all AA/AS students new to Clark State.

The courses in an area of concentration and electives are directed toward the student's major at the transfer institution. These courses must be selected very carefully and must be clearly transferable. Of the 30 hours of coursework in these two categories, no more than 15 should be selected from technical/career programs unless otherwise indicated in a curriculum guide or planned out with an advisor and with the divisional administrator's approval. The Associate of Arts and Associate of Science degrees focus on courses in the liberal arts.

With careful scheduling and advising, a student should be able to transfer with junior standing.

#### Learning Outcomes

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

- read, retain, restate and apply ideas for a variety of specific purposes.
- write clearly and accurately in a variety of contexts and formats
- speak clearly and accurately in a variety of contexts and formats.
- demonstrate effective listening skills.
- work effectively in teams.
- identify problems or issues; identify possible resources; access resources; gather data and organize information; analyze data/evaluate information gathered; and draw conclusions, synthesize results and solve problems.
- demonstrate an awareness of one's culture as well as the culture of others.
- · demonstrate an awareness of global issues.
- demonstrate an understanding of human behavior.

Area 1 - English (8 credit hours)

ENG 111 English I and ENG 112 English II

#### 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 270 Theatre History I or THE 271 Theatre History II) 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 (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 (other than Business Mathematics)\* 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 132, BIO 133, BIO 140, CHM 110, GLG 110, GLG 114, PHY 110, and PHY 120.)

#### Option 2

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

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 5.

#### Capstone Seminar

Effective Fall Quarter 2001, all new students entering the College for the first time pursuing either an AA or AS degree, are now 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 the specific AA/AS program goals.

Students enrolled in the College prior to Fall Quarter 2001 pursuing either an AA or AS degree, can take the Capstone Seminar (HUM 299) and count the course as a Humanities elective toward graduation.

Total credit hours = 90

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

## **Associate of Science**

Four-year colleges and universities generally require that students spend a significant portion of their first two years taking general education courses that build their knowledge and skills in general education. These undergraduate courses are primarily those that a student seeking an AA or AS degree takes at Clark State and then transfers to the institution of his/her choice. Of the 90 credit hours necessary to achieve an AA or AS degree, a minimum of 59 must be in areas 1-6 in the outline of degree requirements.

The remaining credit hours are divided among the Capstone, concentration and electives. Capstone is for all AA/AS students new to Clark State.

The courses in an area of concentration and electives are directed toward the student's major at the transfer institution. These courses must be selected very carefully and must be clearly transferable. Of the 30 hours of coursework in these two categories, no more than 15 should be selected from technical/career programs unless otherwise indicated in a curriculum guide or planned out with an advisor and with the divisional administrator's approval. The Associate of Arts and Associate of Science degrees focus on courses in the liberal arts.

With careful scheduling and advising, a student should be able to transfer with junior standing.

#### Learning Outcomes

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

- read, retain, restate and apply ideas for a variety of specific purposes.
- write clearly and accurately in a variety of contexts and formats.
- speak clearly and accurately in a variety of contexts and formats.
- demonstrate effective listening skills.
- work effectively in teams.
- identify problems or issues; identify possible resources; access resources; gather data and organize information; analyze data/evaluate information gathered; and draw conclusions, synthesize results and solve problems.
- demonstrate an awareness of one's culture as well as the culture of others.
- · demonstrate an awareness of global issues.
- demonstrate an understanding of human behavior.

Area 1 - English (8 credit hours)

ENG 111 English I and ENG 112 English II

#### 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 134 Art History III), Theatre (THE 105 Oral Interpretation, THE 130 Introduction to Theatre, THE 270 Theatre History I or THE 271 Theatre History II) 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 (other than Business Mathematics)\* 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

If you have chosen an AS major because of the mathematics requirement and not for the natural sciences, choose this option. Take three courses, each from a different science area. (Possible classes include BIO 110, BIO 132, BIO 133, BIO 140, CHM 110, GLG 110, GLG 121, PHY 110, and PHY 120.)

#### Option 2

Choose this option if your major pertains to the natural sciences. Take a three-course sequence in Biology, Chemistry, Geology or Physics. (Possible classes include BIO 111-113, BIO 121-123, CHM 121-123, PHY 111-113, PHY 250-252, GLG 111-113.)

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 5.

#### Capstone Seminar

Effective Fall Quarter 2001, all new students entering the College for the first time pursuing either an AA or AS degree, are now 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 the specific AA/AS program goals.

Students enrolled in the College prior to Fall Quarter 2001 pursuing either an AA or AS degree, can take the Capstone Seminar (HUM 299) and count the course as a Humanities elective toward graduation.

Total credit hours = 90

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

# 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 Council, offers the Basic Peace Officer Training Academy. This is the state certifying academy mandated by the Ohio Peace Officer Training Council.

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 state certification.

Basic Peace Officer Training topics include administration, legal, human relations, firearms, driving, traffic accident, investigation, patrol, traffic enforcement, civil disorders, unarmed self-defense, first aid and physical conditioning.

Course	Course	Credit
Number	Title	Hours
CRJ 287	Basic Law Enforcement I	8
CRJ 289	Basic Law Enforcement II	8
	Total credit hours	16

## 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 on the following 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+,Server+, Network+, Linux+, Security+, Project+); Microsoft (Microsoft Certified Professional); Cisco (Certified Network Associate); and Oracle (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.

The program schedules that follow are designed for fultime 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 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. (Security/Wireless concentration)
- implement wireless networking technologies (Security/ Wireless 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 102, Keyboarding/Word Processing.

#### Degree Availability

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

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number	Course Title	Credit Hours
NTK 176 ACC 111 MGT 105 ENG 111	PC/Network Essentials I Accounting I Introduction to Business English I	6 4 3 4
Winter NTK 178 ENG 112 ENG 135	PC/Network Essentials II English II or Business Report Writing**** Management/Marketing/ Accounting Elective*** Humanities/Social Science Elective	6 4 3 3
Spring NTK 179 ENG 221 ITS 12S ITS 200	PC Network Essentials III Business Communications Beginning Spreadsheet Project Management Social Science Elective	6 3 1 5 3
Fall NTK - NTK - NTK -	Concentration A, Course 1* Concentration B, Course 1* NTK/CSD or Co-op Elective(s)** Humanities/Social Science Elective	5 5 5 3
Winter NTK - NTK - NTK - COM 121	Concentration A, Course 2* Concentration B, Course 2* NTK/CSD or Co-op Elective(s)** Effective Speaking	5 5 5 3
Spring NTK - NTK - NTK - NTK 288	Concentration A, Course 3* Concentration B, Course 3* NTK/CSD/ITS or Co-op Elective(s)** Advance Networking Topics	5 5 3 5
	Total credit hours	105

\*Choose any two concentrations from Administration, Infrastructure, Oracle Database and/or Security/Wireless options (see next 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.

\*\*\*\*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, Advanced Computer Networking Option, and Technical Systems Support Option

#### 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	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

#### Security / Wireless Concentration:

This concentration focuses on preparing students to manage and maintain information security and wireless networking infrastructures. Installing, configuring and maintaining information security and wireless technologies are components of this concentration.

NTK 221	Information Security I	5
NTK 222	Information Security II	5
NTK 225	Wireless Networking	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 (Network+, Linux+, Security+, Project+), Microsoft (Microsoft Certified Professional), Cisco (Certified Network Associate) and Oracle (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.

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 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. (Security/Wireless concentration)
- implement wireless networking technologies. (Security/ Wireless 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 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 102 Keyboarding/Word Processing.

#### Degree Availability

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

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number	Course Title	Credit Hours
NTK 201 ACC 111 MGT 105 ENG 111	Cisco Associate I Accounting I Introduction to Business English I	5 4 3 4
Winter NTK 202 ENG 112	Cisco Associate II English II or	5
ENG 135	Business Report Writing*** Management/Marketing/	4
	Accounting Elective*** Humanities/Social Science Elective	3
Spring NTK 203 ENG 221 ITS 12S ITS 200	Cisco Associate III Business Communications Beginning Spreadsheet Project Management Social Science Elective	5 3 1 5 3
Fall NTK - NTK - NTK -	Concentration A, Course 1* Concentration B, Course 1* NTK/CSD or Co-op Elective(s) ** Humanities/Social Science Elective	5 5 5 3
Winter NTK - NTK - NTK - COM 121	Concentration A, Course 2* Concentration B, Course 2* NTK/CSD or Co-op Elective(s)** Effective Speaking	5 5 5 3
Spring NTK - NTK - NTK - NTK 288	Concentration A, Course 3* Concentration B, Course 3* NTK/CSD/ITS or Co-op Elective (s)* Advance Networking Topics	5 5 * 3 5
	Total credit hours	102

\*Choose any two concentrations from Administration, Oracle Database and Security/Wireless (see concentrations on preceding 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. NTK 176, NTK 178 and NTK 179 cannot be used as electives.

\*\*\*\*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 endusers and set up technical support structures. 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 (Network+, Linux+, Security+, Project+); Microsoft (Microsoft Certified Professional); Cisco (Certified Network Associate); and Oracle (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 Services for more information.

The program schedule that follows is designed for fultime 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 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. (Security/Wireless concentration)

Course

• implement wireless networking technologies (Security/ Wireless concentration)

#### Scholastic Preparation

Technical Support students need a high school algebra background equivalent to DEV 101 or 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 102 Keyboarding/Word Processing.

#### Degree Availability

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

#### Humanities/Social Science Electives

Course

A complete listing of humanities and social science electives begins on page 5.

Credit

Number	Title	Hours
Fall NTK 176 ACC 111 MGT 105 ENG 111	PC/Network Essentials I Principles of Accounting I Introduction to Business English I	6 4 3 4
Winter NTK 178	PC/Network Essentials II Management/Marketing/ Accounting Elective***	6
ENG 112 ENG 135	English II or Business Report Writing**** Humanities/Social Science Elective	4 3
Spring NTK 179 ENG 221 ITS 12S ITS 200	PC/Network Essentials III Business Communications Beginning Spreadsheet Project Management Social Science Elective	6 3 1 5 3
	entration A, Course 1* CSD or Co-op Elective(s)** Windows Concepts Beginning Database Beginning Word Processing ITS Elective**** Humanities/Social Science Elective (G	5 5 2 1 1 1 A) 3

Winter		
NTK -	Concentration A, Course 2*	5
NTK -	NTK/CSD or Co-op Elective(s)*	5
COM 121	Effective Speaking	3
ITS 14A	Intermediate Windows Concepts	2
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	105

\*Choose any one concentration from Administration, Infrastructure, Oracle Database and/or Security/Wireless options. (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.

\*\*\*\*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. Any ITS course not already prescribed except for ITS 080, 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 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.

#### 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 Number	Course Title	Credit Hours
NTK 176 NTK 178 NTK 179 NTK 240 NTK 270 NTK 272	PC/Network Essentials I PC/Network Essentials II PC Network Essentials III Linux/Unix Network Administration Microsoft Network Administration I Microsoft Network Administration II	6 6 6 5 5 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 Number	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 Number		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 Fundamentals I	5
NTK 257	Oracle Data Mining and Warehousing	5
	Total credit hours	33

### Security-Wireless Certificate

This certificate is focused on providing the knowledge and skills necessary to plan, install, configure and administer network security and wireless networks.

Course Number	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 221	Information Security I	5
NTK 222	Information Security II	5
NTK 225	Wireless Networking I	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.

Course Number	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
ITS 12A	Window Concepts	2
ITS 14A	Intermediate 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)*	5
	Total credit hours	36

<sup>\*</sup> ITS 080, ITS 102 and ITS 103 cannot be used as electives.

## **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 Services for more information.

The program schedule that follows is designed for fulltime 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 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.

#### Scholastic Preparation

Computer Software Development students need a high school algebra background equivalent to DEV 101 or 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 102, Keyboarding/Word Processing.

#### Degree Availability

These programs are available during the day and evening. Contact your academic advisor about course sequencing.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number	Course Title	Credit Hours
CSD 104 COM 121 ENG 111 ITS 12A ITS 12S MGT 105	Programming Fundamentals Effective Speaking English I Windows Concepts Beginning Spreadsheet Introduction to Business	5 3 4 2 1 3
Winter CSD 114 ITS 12D ITS 107 PHL 205	Visual Basic Programming Beginning Database HTML Fundamentals Deductive Logic Social Science Elective	5 1 3 3 3
Spring CSD119 ENG 112 ENG 135 ITS 108 ITS 110	Programming with ADO.NET English II or Business Report Writing** XML/Web Services Database Management Systems	5 4 3 6
Fall CSD 150 CSD 201 CSD 224 MGT 106	Database Administration Oracle Database Development I Java Concepts I Human Relations Organizational Beha	5 5 4 avior4
Winter CSD 202 CSD 220 CSD 225 CSD - ENG 221	Oracle Database Development II Systems Analysis Java Concepts II CSD, ITS, NTK Elective or EBE 100* Business Communications	5 4 4 2 3
Spring CSD 160 CSD 222 CSD 270 CSD - COM 111	Database Design Systems Design Creating and Publishing Websites CSD, ITS, NTK Elective or EBE 282* Interpersonal Communications	5 4 4 2 3
	Total credit hours	105

<sup>\*</sup>ITS 080 and ITS 102 cannot be used as electives. CSD elective hours must total a minimum of 4 hours.

<sup>\*\*</sup>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 Number	Course Title	Credit Hours
CSD 104	Programming Fundamentals	5
CSD 114	Visual Basic Programming	5
CSD 119	Programming with ADO	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
CSD 224	Java Concepts I	4
CSD 225	Java Concepts II	4
ITS 107	HTML Fundamentals	3
ITS 108	XML Web Services	3
ITS 110	Database Management Systems	6
	Total credit hours	45

## Microsoft Database Administration/ Programming Certificate

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

Course Number	Course Title	Credit Hours
CSD 104	Programming Fundamentals	5
CSD 114	Visual Basic Programming	5
CSD 119	Programming with ADO	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
ITS 107	HTML Fundamentals	3
ITS 108	XML Web Services	3
ITS 110	Database Management Systems	6
NTK 270	Administering Microsoft Professional	5
NTK 272	Administering Microsoft Server	5
	Total credit hours	47

## Microsoft Database Administration/ Networking Certificate

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

Course Number	Course Title	Credit Hours
CSD 150 CSD 160 ITS 108 ITS 110 NTK 270 NTK 272 NTK 274	Database Administration Database Design XML Web Services Database Management Systems Administering Microsoft Professional Administering Microsoft Server Administering Microsoft Network	5 5 3 6 5 5 5
	Total credit hours	34

#### 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	Credit
Number	Title	Hours
GGD 404	ъ п	_
CSD 104	Programming Fundamentals	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
CSD 220	Systems Analysis	4
CSD 222	Systems Design	4
ITS 108	XML Web Services	3
ITS 110	Database Management Systems	6
ITS 200	Project Management	5
	Total credit hours	37

#### Web Services Certificate

The focus of this certificate is to provide the knowledge and skills necessary to develop web applications and e-business systems. Web languages will include both procedural and object-oriented methodologies.

Course Number	Course Title	Credit Hours
CSD 104 CSD 114 CSD 119 CSD 160 CSD 270 ITS 107 ITS 108 ITS 110	Programming Fundamentals Visual Basic Programming Programming with ADO Database Design Creating and Publishing Web Sites HTML Fundamentals XML Web Services Database Management Systems	5 5 5 5 4 3 3 6
	Total credit hours	36

## **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.
- work and participate in group projects.
- identify a community problem and suggest a solution using critical thinking skills.
- 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 5.

Course Number	Course Title	Credit Hours
Fall CRJ 100 CRJ 116	Intro to Criminal Justice	4
CRJ 110	Systems Approach to Computer Technology	3
COR 100	Intro to Corrections	4
ENG 111	English I	4
SWK 105	Chemical Dependency I	4
Winter CRJ 120	Juvenile Procedures	3
COR 105	Probation and Parole	4
ENG 112	English II	4
MTH 106	Business Mathematics	3
PSY 111	Psychology I	3
Spring CRJ 125	Community Policing	3
COM 111	Interpersonal Communication	3
COR 130 ENG 223	Adult/Juvenile Corrections Technical Report Writing	4 3
SOC 110	Sociology	3
SOC 240	Racial and Cultural Minorities	3
Fall COR 280	Jail Practicum	1
PHL 240	Philosophy of World Religions	4 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

## **Criminal Justice**

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 fultime 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 Criminal Justice, a graduate will be able to:

- demonstrate competency by writing an incident report using acceptable college-level vocabulary, grammar and punctuation.
- work and participate in group projects.
- identify a community problem and suggest a solution through critical thinking skills.
- 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.

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 5.

Course Number	Course Title	Credit Hours
Fall CRJ 100 CRJ 112 CRJ 116	Intro to Criminal Justice Traffic Management Systems Approach to Computer	4 3
PHO 111 PSY 111	Technology Photography I Psychology I	3 3 3
Winter CRJ 118 CRJ 120 CRJ 123 ENG 111 MTH 106	Forensic Photography Juvenile Procedures Patrol Operations English I Business Mathematics	3 3 4 3
Spring CRJ 125 COM 111 COM 121 ENG 112 PHO 121 SOC 110	Community Policing Interpersonal Communication or Effective Speaking English II Color Photography I Sociology	3 3 4 3 3
Fall CRJ 201 CRJ 216 CRJ 221 ENG 223 PLS 220 SWK 105	Police Administration Community Relations Forensic Science I Technical Report Writing Constitutional Law Chemical Dependency I	3 3 5 3 3 4
Winter CRJ 223 CRJ 226 CRJ 228 CRJ 231	Forensic Science II Interview/Interrogation Criminal Investigation Criminal Law Humanities/Social Science Elective	5 3 3 3
Spring	Social Justice Ohio Criminal Code Community Resources Practicum	3 3 3 3
	Total credit hours	98

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

## Early Childhood Education Early Childhood Education

The Early Childhood Education (ECE) program prepares individuals for employment in licensed child 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 schedules that follow are designed for fulltime 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:

- · promote child development and learning.
- build family and community relations.
- 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.
- · display an appreciation and respect of diversity.

#### Course Format

Selected courses are presented in both traditional and online 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 new state-of-the-art 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 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 5.

Course Number	Course Creatile Ho	edit ours
ECE 101 ECE 102 ECE 114 ENG 111 PSY 111 SOC 110	Professional Development for Educators Intro to Early Childhood Education Art, Music and the Child English I Psychology I Sociology	1 4 3 4 3 3
Winter ECE 110 ECE 112 ENG 112 PSY 221	Infant/Toddler Education Resources in Early Childhood Education English II Human Growth and Development I Technical Elective*	3 4 4 3 2
Spring ECE 106 ECE 120 ECE 250 COM 121 ITS 12W SOC 240	Observing Young Children Language Development and the Child Positive Guidance: Early Childhood Effective Speaking Beginning Word Processing Racial and Cultural Minorities	2 3 3 1 3
ECE 211 ECE 213 ECE 215 ECE 223 ENG 223	Sensory Motor Skills Health, Safety and Nutrition Math/Science Activities Preschool Curriculum and Instruction Technical Report Writing	3 3 3 3

Winter			Winter		
ECE 217	Special Needs Child	4	ECE 110	Infant/Toddler Education	3
ECE 224	School Age Curriculum	3	ECE 112	Resources in Early Childhood Education	n 4
ECE 271	ECE Practicum I	2	ENG 112	English II	4
ECE 291	Child Care Seminar I	2	PSY 221	Human Growth and Development I	3
MTH 121	College Algebra I**	3		Humanities/Social Sciences Elective (GA)	3
	Technical Elective*	3			
			Spring		
Spring			ECE 250	Positive Guidance: Early Childhood	3
ECE 225	Professional, Legal, Ethical Issues	2	MGT 106	Human Relations and Organizational	
ECE 230	Organizational Management	3		Behavior	4
ECE 272	ECE Practicum II	2	COM 121	Effective Speaking	3
ECE 292	Child Care Seminar II	2	ITS 12W	Beginning Word Processing	1
	Technical Elective*	3	OAD 200	Administrative Office Management	3
	Humanities/Social Science Elective (C	GA) 3	SOC 110	Sociology	3
	Total credit hours	96	Fall		
			ECE 213	Health, Safety and Nutrition	3
	1		ECE 000	December 1 C and 1 to a section	0

<sup>\*</sup>Technical electives include: ECE 210, ECE 220, ECE 221, ECE 222, any EEP course or Special Topics course with program coordinator approval.

## Early Childhood Education Administration Option

The Early Childhood Education Administration degree 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 online formats. All courses with labs will be conducted on campus regardless of the format. Contact your advisor for further information.

Course	Course	Credit
Number	Title	Hours
ECE 101 ECE 102 ECE 114 MGT 112 ENG 111 PSY 111	Professional Development for Educate Intro to Early Childhood Education Art, Music and Child Principles of Business Management English I Psychology I	ors 1 4 3 4 4

	Dellavioi	4
COM 121	Effective Speaking	3
ITS 12W	Beginning Word Processing	1
OAD 200	Administrative Office Management	3
SOC 110	Sociology	3
	3 3 3 3 3 3 3	
Fall		
ECE 213	Health, Safety and Nutrition	3
ECE 223	Preschool Curriculum and Instruction	3
ACC 111	Principles of Accounting I	4
ENG 223	Technical Report Writing	3
	Technical Elective*	2
	Toommout Ereceive	~
Winter		
ECE 217	Special Needs Child	4
ECE 224	School Age Curriculum	3
ECE 271	ECE Practicum I	2
ECE 275	Leadership and Mentoring in	~
LCL 270	Early Childhood Programs	2
ECE 291	Child Care Seminar I	2
LCL 201	Ciliid Care Sciilliai 1	~
Spring		
ECE 225	Professional, Legal, Ethical Issues	2
ECE 230	Organizational Management	3
ECE 283	Child Care Practicum - Administration	
ECE 293	Child Care Seminar - Administration	2
SOC 240	Racial and Cultural Minorities	3
	Technical Elective*	3
	reclinical Elective	J
	Total credit hours	96
	rotar creatt flours	00

<sup>\*</sup>Technical electives include: ECE 106, ECE 210, ECE 220, ECE 221, ECE 222, any EEP course or Special Topics course with program coordinator approval.

<sup>\*\*</sup>Students may substitute MTH 106 Business Mathematics for MTH 121 College Algebra I.

## Early Childhood Education Departmental Certificates

Two departmental certificates are available for students interested in gaining specialized knowledge in literacy or early childhood administration. A certificate application form is available in the Early Childhood Education office located in the Applied Science Center. These certificates can be completed in one year.

## Early Childhood Administration Departmental Certificate

The Early Childhood Administration Certificate enables students to meet the state minimum requirements for a director of a licensed child care center. The certificate can be completed in one academic year. Instructor permission is required for this certificate.

Course Number	Course Title	Credit Hours
ECE 101 ECE 102 ECE 110	Professional Development for Educate Intro to Early Childhood Education Infant/Toddler Education	ors 1 4 3
ECE 213 ECE 217 ECE 225	Health, Safety and Nutrition Special Needs Child Professional, Legal, Ethical Issues	3 4 2
ECE 230 ENG 111	Organizational Management English I	3
ITS 12W MTH 106 PSY 111	Beginning Word Processing Business Math Psychology	1 3 3
ECE - ECE -	Technical Elective Technical Elective	2 3
	Total credit hours	36

## Early Literacy Development Departmental Certificate

The Early Literacy Development Certificate is intended to expand the core knowledge of in-service teachers. Instructor permission is required for this certificate.

Course Number		Credit Hours
ECE 120 ECE 210 ECE 220 ECE 221 ECE 222	Language Development and the Child Children's Literature Early Literacy Development - A Early Literacy Development - B Early Literacy Development - C	3 3 3 3
	Total credit hours	15

Note: Enrollment must be approved in advance. Instructor permission required. Approval application available in Early Childhood Education Office. Limit of three transfer credit hours.

## **Early Elementary Paraprofessional**

The Early Elementary Paraprofessional program prepares individuals for employment as educational paraprofessionals in a variety of school settings. Graduates may also have the opportunity to complete a licensure program through articulation agreements with four-year colleges and universities at the baccalaureate level.

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 fulltime 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 wellbeing 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 online 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 320 clock hours of supervised experiences in approved classroom settings during Practicums I and II. They are given the opportunity to observe and to complete student teaching with children in the learning environment. 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 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 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

Course

Course

Course Number	Title	Hours
Fall ECE 101 ECE 102	Professional Development For Educat Introduction to Early	ors 1
DOD 444	Childhood Education	4
ECE 114	Art Music & Young Child	3
ECE 213 ENG 111	Health Safety & Nutrition English I	3 4
ITS 103	Information Technology Basics	3
Winter EEP 122 ECE 217 ECE 210 ENG 112	Diversity in Education Special Needs Children Children's Literature English II	3 4 3 4
PSY 111	Psychology I	3
Spring EEP 110 ECE 120 EEP 152	Teaching in American Schools Language Development & The Child Positive Guidance in the Elementary Classroom	3 3
COM 111 ECE 106	Interpersonal Communication Observing Young Children	3 2
PSY 221	Human Growth and Development I	3
Fall EEP 205 EEP 200 SOC 110 ENG 223 MTH 121	Elementary Curriculum Planning and Delivery Educational Teaming: Working with Families Sociology I Technical Report Writing College Algebra I Technical Elective*	3 3 3 3 3
Winter		
EEP 228	Tutoring and Small Group Instruction	
ECE 224 COM 121	School Age Curriculum Effective Speaking	3
ECE 271	Practicum I	2
ECE 291	Seminar I	2
	Technical Elective*	3
Spring EEP 216 SOC 240 ECE 225 ECE 272 ECE 292	Technology for Educators Racial and Cultural Minorities Professional Legal and Ethical Issues Practicum II Seminar II Technical Elective*	3 3 2 2 2 3
	Total Credit Hours	101

Credit

<sup>\*</sup>Technical electives include ECE 211, ECE 215, ECE 220, ECE 221, ECE 222 or Special Topics courses with program coordinator approval.

## 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 the necessary knowledge and practical skills to provide out-of-hospital medical care using the current standards of practice.
- communicate effectively with victims, families and other healthcare providers to ensure total quality care is given.
- utilize critical thinking skills and decision-making processes in assessing patients.
- demonstrate proper use of equipment for pre-hospital care.

#### 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.) If needed, the basic math course must be completed with a "C" or better. A student may need to take other developmental courses as shown 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 101, the student must meet the following entrance requirements:

 Complete a Request to Enter form in the Admissions Office

- Proof of minimum age of 18
- · Ohio EMT-Basic certification
- Current CPR provider card
- Three letters of recommendation
- Complete paramedic admission test
- Physical exam and health requirements
- Successful completion of BIO 102, BIO 105

#### Humanities/Social Science Electives

0 1	0	
Course Number	Course Tille	Credit Hours
Summer BIO 102 BIO 105	Medical Terminology Fundamentals of Anatomy and Physiology	3
EMS 101 EMS 112 ENG 111 ITS -	Paramedic Theory/Practice I Hospital Practice I English I Computer Modules	7 1 4 3
Winter EMS 102 EMS 114 EMS 120 ENG 112 PSY 111	Paramedic Theory/Practice II Hospital Practice II ALS Field Observation I English II Psychology I	7 2 1 4 3
Spring EMS 105 EMS 116 EMS 122 COM 111	Paramedic Theory/Practice III Hospital Practice III ALS Field Observation II Interpersonal Communication Humanities/Social Science Elective	7 2 1 3 3
Fall EMS 230 PHL 210	EMS Supervision Ethics Humanities/Social Science Elective Technical Elective*	3 3 3 3
Winter EMS 220 EMS 240 EMS 280 PSY 221	EMS Pharmacology Hazardous Material/Disaster Manage Advanced Rescue Human Growth and Development I	3 ment3 4 3
Spring EMS 225 EMS 250 ENG 223	Advanced Patient Assessment EMS Legal Insights Technical Report Writing Humanities/Social Science Elective	4 2 3 3
	Total credit hours	92

<sup>\*</sup>Technical electives include: SWK 105, SWK 220.

# 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 must have Basic Life Support Certification for Professional CPR prior to entering this course. Students must be 18 years of age to sit for the state examination.

Course	Course	Credit
Number	Title	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 two courses listed below provide the foundation for state and National Registry Certification at the intermediate level. The student could apply to enter the paramedic program in the winter quarter if they have completed BIO 102 and BIO 105.

Course	Course	Credit
Number	Title	Hours
EMS 104	EMT-Intermediate Theory/Practice	7
EMS 113	EMT-Intermediate Hospital Field Practi	ice 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 and exceed 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 101, the student must meet the following entrance requirements:

- Complete a Request to Enter form in the Admissions Office
- Proof of minimum age of 18
- Ohio EMT-Basic certification
- · Current CPR provider card
- Three letters of recommendation
- Complete paramedic admission test
- Physical exam and health requirements
- Successful completion of BIO 102, BIO 105

Course Number	Course Title	Credit Hours
Summer BIO 102 BIO 105	Medical Terminology Fundamentals of Anatomy & Physiolo	3 gy 4
Fall EMS 101 EMS 112	Paramedic Theory/Practice I Hospital Practice I	7 1
Winter EMS 102 EMS 114 EMS 120	Paramedic Theory/Practice II Hospital Practice II ALS Field Observation I	7 2 1
Spring EMS 105 EMS 116 EMS 122	Paramedic Theory/Practice III Hospital Practice III ALS Field Observation II	7 2 1
	Total credit hours	35

## 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
- Ohio EMT-Basic certification
- Current CPR provider card; ACLS provider; PALS provider, PHTLS or BTLS provider
- Three letters of recommendation
- An 80% on paramedic admission test
- Physical exam and health requirements
- Proof of licensure for RN, nurse practitioner or physician's assistant

Course	Course	Credit
Number	Title	Hours
EMS 288	Paramedic Theory for RNs	6

# Engineering Technologies CAD Drafting Technology

Students completing an associate degree in CAD Drafting 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, CAD Drafting 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.

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 fultime 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 degree in CAD Drafting 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 drafting skills, knowledge and ability in Computer-Aided 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 drafting skills and proficiency with Computer-Aided Design (CAD) to produce an illustrated part/ maintenance manual.

#### 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 Number	Course Title	Credit Hours
Fall DFT 102 ENT 101 ENT 121 ENG 111 INT 101 MTH 101	Drafting II Engineering Methods Computer Basics for Applied Techno English I Metrology I Technical Math Applications A	3 3 logy 3 4 2 1
Winter DFT 211 ENT 109 ENT 110 ENG 112 MTH 107 MTH 121	Computer-Aided Design I Manufacturing Laboratory Manufacturing Processes English II Technical Math Applications B College Algebra I	4 2 3 4 1 3
Spring DFT 212 ENT 111 ENG 223 MTH 108 MTH 140 PHY 111	Computer-Aided Design II Engineering Materials Technical Report Writing Technical Math Applications C Trigonometry Physics I	4 3 3 1 3 4
Foll DFT 111 DFT 214 ENT 205 ENT 211	Architecture I Solid Modeling Circuits and Machines Statics	4 4 4 3
Winter DFT 215 DFT - COM 121 ENT 213	Advanced Solid Modeling Technical Elective or EBE 100** Effective Speaking Strength of Materials Humanities/ Social Science Elective	3 2 3 4 (GA)3
Spring DFT 203 DFT - ECO 110 SOC 110	Sociology*	4 4 3 3
	Total credit hours	95

<sup>\*</sup>Other humanities/social science electives may be substituted. At least one must be a social science.

<sup>\*\*</sup>Students must earn a minimum of six credit hours in any combination of co-op (EBE 100, EBE 282, EBE 283, EBE 284, EBE 292, EBE 293, and EBE 294) or technical electives. Technical electives may come from any courses not already prescribed in the following areas: DFT (except DFT 101, ENT, INT (except INT 100), or NKT 176.

## 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 fulltime 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 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 Number	Course Title	Credit Hours
DFT 102 ENT 101 ENT 121 ENG 111 INT 101 MTH 101	Drafting II Engineering Methods Computer Basics for Applied Technol English I Metrology I Technical Math Applications A	3 3 logy3 4 2 1
Winter DFT 211 ENT 109 ENT 110 MTH 107 MTH 121	Computer-Aided Design I Manufacturing Laboratory Manufacturing Processes Technical Math Applications B College Algebra I	4 2 3 1 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		
	Angleita atuma I	1
DFT 111	Architecture I	4
DFT 214	Solid Modeling	4
	Total credit hours	48

## **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 110) 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 Number	Course Title	Credit Hours
Fall CHM 121 ENG 111 HST 111 MTH 221	General Chemistry I* English I Western Civilization to 14th Century Calculus I **	5 4 3 5
Winter DFT 211 ENG 112 HST 112	Computer Aided Design I English II Western	4
MTH 222	Civilization from 14 <sup>th</sup> through 18 <sup>th</sup> Centuries Calculus II	3 5
Spring ENG 230 HST 113	Great Books: Literature Western Civilization	3
MTH 223 SOC 110	from 19th Century to Present Calculus III Sociology	3 5 3
Summer ECO 110 MTH 240 PLS 130	General Economics Linear Algebra Political Issues	3 3 3
Fall MTH 224 PHY 250 PSY 111	Calculus IV/Multivariate Calculus General Physics I *** Psychology I	5 6 3
GEO 220 SOC 220	World Regional Geography or Comparing Cultures	3
Winter ENT 261 MTH 230	Engineering Mechanics I Differential Equations or	5
CHM 122 PHY 251 ART 130	General Chemistry II **** General Physics II Appreciation of the Arts or	5 5
MUS 130 THE 130	Music Appreciation or Introduction to Theatre	3
Spring ENT 262 PHL 250 PHY 252 RST -	Engineering Mechanics II Great Books: Philosophy General Physics III Regional Studies Course	5 3 5 3

Total credit hours

- \*Students with an inadequate chemistry background may need to take CHM 110, CHM 114 and/or CHM 115 before CHM 121
- \*\*Students 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 three-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 basic knowledge of electrical, mechanical and fluid power machines.
- use commonly available instruments to assist in analysis and troubleshooting of electrical and electrically controlled systems.
- use schematics, operating manuals and troubleshooting guides to troubleshoot 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.

#### Directed Learning Laboratory

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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 both day and evening 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.

#### Scholastic Preparation

Course

Course

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 1.

Credit

Number	Title	Hours
INT 101 INT 120 DFT 102 ENG 111 ENT 121	Metrology I Hydraulic/Pneumatics I Drafting II English I Computer Basics for Applied Technolog	2 4 3 4 gy 3
Winter INT 115 INT 125 INT 140 INT 150 DFT 211	Industrial Calculations Hydraulic/Pneumatics II Industrial Safety Electrical Systems Computer-Aided Design I	3 4 2 4 4
Spring INT 155 INT 170 COM 111 EBE 100 ENG 112	Motors and Motor Controls Mechanical Maintenance Interpersonal Communication Employability Skills English II	4 4 3 2 4
Summer INT	Co-op or Technical Elective **	4
Fall INT 251 INT 252 NTK 176 SPN 100	Programmable Logic Controllers Automated Systems PC Network Essentials I Conversational Spanish*	4 4 6 3
Winter INT 255 INT 260 ENG 223	Electrical Troubleshooting Electrical Distribution Technical Report Writing Humanities/ Social Science Elective (GA	4 4 3 A) 3
Spring INT 270 INT 280 COM 121 ECO 110 INT -	Industrial Machine Maintenance Industrial Technology Projects Effective Speaking General Economics* Co-op or Technical Elective **	4 4 3 3 4
	Total credit hours	103

\*Other humanities and social science electives may be substituted. At least one must be a social science.

\*\*Students must earn a minimum of eight credit hours in any combination of co-op (EBE 282, EBE 283, EBE 284, EBE 292, EBE 293, and 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.

### **Electrical Maintenance Certificate**

The Electrical Maintenance Certificate provides a broad base of courses in the field of industrial maintenance.

Course Number	Course Title	Credit Hours
Fall INT 101 INT 120 DFT 102 ENG 111 ENT 121	Metrology I Hydraulics/Pneumatics I Drafting II English I Computer Basics for Applied Technolog	2 4 3 4 gy 3
Winter INT 115 INT 125 INT 150 INT 170 EBE 100	Industrial Calculations Hydraulics/Pneumatics II Electrical Systems Mechanical Maintenance Employability Skills	3 4 4 4 2
Spring INT 155 INT 251 COM 121 INT -	Motors and Motor Controls Programmable Logic Controllers Effective Speaking Co-op or Technical Elective	4 4 3 4
	Total credit hours	48

#### **Electronics Certificate**

The Electronics Certificate provides an extensive study of solid-state devices and systems for industrial operations.

Course Number	Course Title	Credit Hours
Fall INT 101 INT 105 INT 115 INT 150 ENT 121	Metrology I Blueprint Reading and Schematics Industrial Calculations Electrical Systems Computer Basics for Applied Technologies	2 3 3 4
Winter INT 175 INT 251 COM 121 EBE 100 ENG 111	Foundations of Digital Control Programmable Logic Controllers Effective Speaking Employability Skills English I	4 4 3 2 4

INT 155 INT 212 INT 252	Motors and Motor Controls Electronic Systems Automated Systems	4 4 4
INT - Summer	Co-Op or Technical Elective	4
INT 225	Industrial Electronics  Total credit hours	3 51

## 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 Career Services to secure an appropriate co-op site.

The program schedule that follows is designed for fultime 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 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.

Humanities/Social Science Electives

Course Number		Credit Hours
Fall ENT 101 ENT 121 DFT 102 INT 101 ENG 111 MTH 101	Engineering Methods Computer Basics for Applied Technolo Drafting II Metrology I English I Technical Math Applications A	3 gy 3 3 2 4 1
Winter ENT 109 ENT 110 ENG 112 DFT 211 MTH 107 MTH 121	Manufacturing Lab Manufacturing Processes English II Computer Aided Design I Technical Math Applications B College Algebra I	2 3 4 4 1 3
Spring ENT 111 DFT 211 EBE 100 MTH 108 MTH 140 PHY 111	Engineering Materials Computer-Aided Design I Employability Skills Technical Math Applications C Trigonometry Physics I	3 4 2 1 3 4
Summer ENT 205 ENT 210 ENT -	Circuits and Machines Engineering Statistics Co-op or Technical Elective **	4 3 4
Fall ENT 211 ENT - ENG 223 INT 215 INT 251	Statics Technical Elective** Technical Report Writing Statistical Process Control Programmable Logic Controllers	3 3 3 4
Winter ENT 213 ENT 221 ENT - INT 252	Strength of Materials Computer Numerical Control Technical Elective** Automated Systems Humanities/ Social Science Elective (G.	4 4 3 4 A) 3
Spring ENT - COM 121 ECO 110 SOC 110	Co-op or Technical Elective ** Effective Speaking General Economics* Sociology*	4 3 3 3
	Total credit hours	108

\*Other humanities/social science electives may be substituted. At least one course must be a social science.

\*\*Students must earn a minimum of 14 credit hours in any combination of co-op (EBE 282, EBE 283, EBE 284, EBE 292, EBE 293, and EBE 294) or technical electives. Technical electives may come from any courses not already prescribed in the following areas: DFT (except DFT 101), ENT, INT, or NTK 176.

### 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 con-trollers, 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.

Course Number	Course Title	Credit Hours
ENT 101 ENT 121 DFT 102 ENG 111 MTH 101 MTH 121	Engineering Methods Computer Basics for Applied Technolo Drafting II English I Technical Math Applications A College Algebra I	3 ogy 3 3 4 1 3
Winter ENT 109 ENT 110 ENT 205 DFT 211 MTH 107 MTH 140	Manufacturing Processes Lab Manufacturing Processes Circuits and Machines Computer-Aided Design I Technical Math Applications B Trigonometry	2 3 4 4 1 3
Spring ENG 112 INT 101 INT 250 INT 252 MTH 108 PHY 111	English II Metrology I Programmable Logic Controllers Automated Systems Technical Math Applications C Technical Physics I	4 2 3 4 1 4
	Total credit hours	52

## 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 Number	Course Title	Credit Hours
GPH 100 GPH 105 ART 111 ENG 111 MGT 105	Introduction to Graphic Design Design Fundamentals Drawing I English I Introduction to Business	4 3 3 4 3
Winter GPH 110 GPH 112 ART 112 ENG 112 MKT 240	Digital Illustration Digital Typography I Drawing II English II Electronic Business Applications	3 3 3 4 4
Spring GPH 114 GPH 201 ART 113 ART 135 ENG 223	Digital Typography II Electronic Imagery I Drawing III Art History III Technical Report Writing	3 3 3 3 3
GPH 120 GPH 202 GPH 211 ART 130 PHL 220 SOC 220	Logo, Symbol, Corporate ID Electronic Imagery II Computer Layout I Appreciation of the Arts Business Ethics Comparing Cultures	3 3 3 3 3 3
Winter GPH 203 GPH 212 GPH 220 GPH 230 GPH 251	Electronic Imagery III Computer Layout II Illustration Techniques Introduction to Web Design Professional Development I	3 3 3 3 3
Spring GPH 205 GPH 231 GPH 252 GPH 285 MGT 106	Advertising Layout Intermediate Web Design Professional Development II Graphic Design Internship Human Relations and Organizational Behavior	3 3 3 3
	T-4-1 1:4 h	0.0

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.

98

Total credit hours

# Legal Assisting Legal Assisting

The Legal Assisting Technology program trains persons to assist attorneys in the delivery of legal services. Legal assistants 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 legal assisting. 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 the Business and Applied Technologies Division.

Course Number	Course Title	Credit Hours
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
MTH 106	Business Mathematics or	
MTH 121	College Algebra I	3
PLS 110	American National Government	3
PSY 111	Psychology I or	
SOC 110	Sociology	3
One of the fo	ollowing humanities electives:	
ART 130	Appreciation of the Arts	3
ENG 130	Introduction to Literature	3
PHL 110	Philosophy	3
PHL 230	Medical Ethics	3
PHL 240	Philosophy of World Religions	3
One of the fo	ollowing career-related electives:	
ACC 113	Principles of Accounting III	4
ACC 221	Tax Accounting I	4
ECO 222	Principles of Microeconomics	3
PHL 200	Practical Logic	3
PLS 220	Constitutional Law	3
RES 240	Real Estate Appraisal	2
RES 245	Real Estate Finance	2
	Total Clark State credit hours	36-38

# 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 fultime 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, 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 degree in Management, a graduate will be able to:

- 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 Business Management program is available during the day and the evening. Students should consult with an advisor for the recommended sequencing of courses.

#### Humanities/Social Science Electives

Course Number	Course Title	Credit Hours
MGT 105 ACC 111 ENG 111 ITS 103 MTH 106	Introduction to Business Principles of Accounting I English I Information Technology Basics* Business Mathematics	3 4 4 3 3
Winter MGT 112 ACC 112 ENG 135 ENG 112 ITS 12P ITS 12S MKT 200	Principles of Management Principles of Accounting II Business Report Writing**** or English II Beginning Presentation Graphics* Beginning Spreadsheet* Principles of Marketing	4 4 1 1 4
Spring MGT 106 MGT 202 MGT - ACC 113 ENG 221 ITS 12D	Human Relations & Organizational Behavior Customer and Quality Management Management Elective or EBE 100** Principles of Accounting III Business Communications Beginning Database*	4 4 2 4 3 1
Fall MGT 266 STT 264 MGT ECO 221	Quantitative Business Methods or Statistics I Management Elective or co-op** Principles of Macroeconomics Humanities/Social Science Elective (GA)*** Humanities/Social Science Elective**	4 4 3 * 3
Winter MGT 225 MGT 260 MGT 270 COM 121 LSC 272	Human Resource Management Business Law Business Finance Effective Speaking Operations and Supply Chain Management	3 3 4 3
Spring MGT 250 MGT 265 MGT 290 ECO 222 PSY 111	Leadership in Organizations Negotiation Skills Business Strategy and Policy Seminar Principles of Microeconomics Psychology I	4 3 4 3 3
	2000	100

<sup>\*</sup>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 102, Keyboarding/Word Processing.

<sup>\*\*</sup>MGT electives must total 6 credit hours. They can come

from any combination of courses not already prescribed that use the following course codes: MGT, MKT, LSC, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080), 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.

## 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 fultime 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, 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 degree in Logistics and Supply Chain Management, a graduate will be able to:

- 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.

#### Humanities/Social Science Electives

Course Number		Credit Hours
ACC 111 ENG 111 ITS 12S ITS 103 MGT 105 MTH 106	Principles of Accounting I English I Beginning Spreadsheet* Information Technology Basics* Introduction to Business Business Mathematics	4 4 1 3 3 3
Winter ENG 135 ENG 112 MGT 106 MGT 112 MKT 240 ITS 12P	Business Report Writing **** or English II Human Relations & Organizational Behavior Principles of Management Electronic Business Applications Beginning Presentation Graphics*	4 4 4 4 1
Spring LSC 210 ENG 221 ITS 12D MGT 202 MGT 267	Purchasing & Supply Management Business Communications Beginning Database* Customer and Quality Management Introduction to International Business Humanities/Social Science Elective***	4 3 1 4 3 3
Fall LSC 220 LSC - ECO 221 MGT 266 STT 264	Logistics & Physical Distribution Logistics Elective or EBE 100** Principles of Macroeconomics Quantitative Business Methods or Statistics I Humanities/Social Science Elective (GA)***	4 2 3 4 3
Winter LSC 272 LSC - COM 121 MGT 260 MKT 200	Operations & Supply Chain Managemer Logistics Elective or Co-op** Effective Speaking Business Law Principles of Marketing	nt 5 3 3 4

Spring		
LSC 275	Inventory & Materials Management	4
LSC -	Logistics Elective or co-op**	2
MGT 265	Negotiation Skills	3
MGT 290	Business Strategy and Policy Seminar	4
PSY 111	Psychology I	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 102, Keyboarding/Word Processing, before taking a computer class.

\*\*LSC electives must total seven credit hours. They can come from any combination of courses not already prescribed that use the following course codes: LSC, MGT, MKT, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080), NTK, OAD and 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 degree in Marketing and E-Business, a graduate will be able to:

- 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.

#### Humanities/Social Science Electives

Course Number	Course Title	Credit Hours
Fall		
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	Introduction to Business	3
MTH 106	Business Mathematics	3
Winter		
MKT 200	Principles of Marketing	4
ACC 112	Principles of Accounting II	4
ENG 221	Business Communications	3
MGT 112	Principles of Management	4
Humanit	ies/Social Science Elective***	3
Spring MKT Mork	ating Floative on FDF 100	2
ENG 135	eting Elective or EBE 100	۷
	Business Report Writing**** or	4
ENG 112	English II	4
ITS 12D	Beginning Database*	1
MGT 106	Human Relations &	4
MOTEROOF	Organizational Behavior	4
MGT 202	Customer and Quality Management	4
	Humanities/Social	0
	Science Elective (GA)***	3

Fall			Course	Course
MKT 210	Pricing Strategies	4	Number	Title
MKT 215	Product Management	3	5 II	
MKT -	Marketing Elective or Co-op	2	Fall	I
ITS 12P	Beginning Presentation Graphics*	1	MGT 105	Introduction t
LSC 220	Logistics & Physical Distribution	4	ACC 111	Principles of A
MGT 266	Quantitative Business Methods or		ENG 111	English I
STT 264	Statistics I	4	ITS 103	Information T
			MTH 106	Business Math
Winter			147	
MKT 240	Electronic Business Applications	4	Winter	Human Dalati
MKT 255	Promotion Strategies	4	MGT 106	Human Relation
COM 121	Effective Speaking	3	MGT 112	Principles of N
ECO 221	Principles of Macroeconomics	3	ACC 112 ENG 135	Principles of A
MGT 260	Business Law	3	ENG 133 ENG 112	Business Repo
				English II
Spring			ITS 12S	Beginning Spr
MKT 245	Sales and Sales Management	3	ITS 12P	Beginning Pre
MGT 250	Leadership in Organizations	4	C :	
MGT 265	Negotiation Skills	3	Spring MGT 202	Customer and
MGT 290	Business Strategy and Policy Seminar	4	MGT 202 MGT -	Customer and
PSY 111	Psychology I	3	ACC 113	Management I
			COM 121	Principles of A
	Total	106	ENG 221	Effective Spea
			LING LLI	Business Com

\*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 102, Keyboarding/Word Processing.

\*\*MKT electives must total four credit hours. They can come from any combination of courses not already prescribed that use the following course codes: MKT, MGT, LSC, ACC, CSD, EBE (except EBE 110), ITS (except ITS 080), NKT, 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 Number	Course Title	Credit Hours
Fall		
MGT 105	Introduction to 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
Winter		
MGT 106	Human Relations and Org 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
Spring		
MGT 202	Customer and Quality Management	4
MGT -	Management Elective**	3
ACC 113	Principles of Accounting III	4
COM 121	Effective Speaking	3
ENG 221	Business Communications	3
ITS 12D	Beginning Database*	1
	Total credit hours	53
*Students w	with little or no computer background	d sho

\*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 102, Keyboarding/Word Processing.

\*\*MGT electives must total three credit hours. They can come from any combination of courses not already prescribed that use the following course codes: 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 to the organization. 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 Number	Course Title	Credit Hours
MGT 105 MGT 106	Introduction to Business Human Relations and	3
	Organizational Behavior	4
MGI 112	Principles of Business Management	4

MGT 202	Customer and Quality Management	4	LSC 220	Logistics and Physical Distribution	4
MKT 200	Principles of Marketing	4	MGT 105	Introduction to Business	3
MKT 245	Sales/Sales Promotion	3	MGT 112	Principles of Management	4
ITS 103	Information Technology Basics	3	MGT 202	Customer and Quality Management	4
PSY 111	Psychology I	3	MGT 266	Quantitative Business Methods or	
	·		STT 264	Statistics I	4
	Total credit hours	28	MTH 106	Business Mathematics	3

## 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 Number	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
	ITS 12D	Beginning Database	1
	ITS 12S	Beginning Spreadsheet	1
	ITS 103	Information Technology Basics	3
	MGT 105	Introduction to Business	3
	MGT 106	Human Relations and	
		Organizational Behavior	4
	MGT 112	Principles of Management	4
	MGT 202	Customer and Quality Management	4
	MGT 260	Business Law	3
	MGT 265	Negotiation Skills	3
	MGT 266	Quantitative Business Methods or	
	STT 264	Statistics I	4
	MTH 106	Business Mathematics	3
		Total credit hours	54

## Marketing 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 Number	Course Title	Credit Hours
MKT 200 MKT 210 MKT 215 MKT 240 MKT 255 ACC 111 ITS 12D	Principles of Marketing Pricing Strategies Product Management Electronic Business Applications Promotion Strategies Principles of Accounting I Beginning Database	4 4 3 4 4 4
ITS 12S ITS 103	Beginning Spreadsheet Information Technology Basic	1 3

#### Small Business Certificate

Total credit hours

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.

50

Course Number	Course Title	Credit Hours
MGT 105	Introduction to Business	3
MGT 106	Human Relations and	
	Organizational Behavior	4
MGT 112	Principles of Business Management	4
MGT 214	Small Business Theory and Practice	4
MGT 202	Customer and Quality Management	4
MGT 250	Leadership in Organizations	4
MGT 260	Business Law	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
ITS 103	Information Technology Basics	3
	Total credit hours	48

## Supervisory Certificate

This certificate is focused on developing the essential skills and knowledge needed by first-line supervisors. This 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 Number	Course Title	Credit Hours
MGT 105	Introduction to Business	3
MGT 106	Human Relations	
	and Organizational Behavior	4
MGT 112	Principles of Business Management	4
MGT 202	Customer and Quality Management	4
MGT 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 Laboratory Medical Laboratory Technology

Medical Laboratory 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 fultime 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.
- 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.
- display professional characteristics.
- 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.

#### Certification

Upon completion of the accredited program, graduates are required to take national certifying examinations. Fees for this exam are collected throughout the program. 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.

#### Health Requirements

Medical Laboratory Technology students must meet health requirements by the end of the Spring Quarter of their first year in order to meet requirements for the directed practice courses. Specific information will be provided prior to Directed Practice I.

Applicants must be physically and emotionally able to fulfill the functions of the medical laboratory technician.

#### 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.

#### Liability Insurance

Students will be billed for liability insurance for each year of clinical courses.

#### Humanities/Social Science Electives

Course Number	Course Title	Credit Hours
First MLT 101 MLT 102 MLT 111	Medical Laboratory Orientation Medical Laboratory Orientation Lab Chemistry for Technicians	2 1 3
MLT 116	Phlebotomy	2
MLT 117 BIO 105	Phlebotomy Laboratory Fundamentals of	2
D10 100	Anatomy and Physiology	4
Second		
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 111	English I	4
ITS 103	Information Technology Basics	3
Third		
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
ENG 112	English II	4
PSY 111	Psychology I	3

rourtn		
MLT 181	Directed Practice I	4
MLT 191	Seminar I	3
COM 111	Interpersonal Communication	3
Fifth		
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 Communications	3
	Humanities/Social Science Elective (GA)	3
Sixth		
MLT 223	Hematology II	3
MLT 224	Hematology II Lab	3
MLT 226	Immunohematology	4
MLT 227	Immunohematology Lab	4
	Humanities/Social Science Elective	3
Seventh		
MLT 270	MLT Review & Update	4
MLT 281	Directed Practice II	4
MLT 291	Seminar II	3
	Total credit hours 1	03

## **NURSING**

## **Nurse Aide Training**

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. 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	Credit
Number	Title	Hours

MST 181 Nurse Aide Training

## **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.
- 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 and families from diverse cultures through the life cycle.
- use critical thinking and problem solving to draw logical conclusions.
- 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. 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

6

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/DEV 061 and/or CPE 062/DEV 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last five 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/DEV 091 and/or CPE 101/DEV 101). Students are excused from taking the math placement test if they have taken and 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 110, Fundamentals of Chemistry or its equivalent)
  with a grade of "C" or better.
- a cumulative grade point average of 2.0 or greater in the required courses in the curriculum.
- licensure as practical nurse (PN) for at least one year.
- current practice as a PN. (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 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.

#### Health Requirements

Transition students must meet health requirements before they take the first clinical nursing course. Specific information will be provided prior to beginning the nursing transition course.

#### 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.

#### Liability Insurance

Students will be billed for liability insurance for the clinical courses.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number	Course Title	Credit Hours
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 3
PSY 221	Human Growth and Development I	3
Spring		
BIO 123	Anatomy and Physiology III	4
BIO 131	Microbiology	4
PSY 230	Abnormal Psychology	3
Spring or Sum	mor	
NUR 175	Transition to Registered Nursing*	4

\* 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

0011111101 01 1 01		
NUR 274	Nursing IV	5
NUR 275	Nursing V	5
ENG 223	Technical Report Writing	3
	Humanities	3
Fall or Winter		
NUR 276	Nursing VI	11
SOC 110	Sociology	3
	Humanities/Social Science Elective (GA)	3

Winter or Spi	ring	
NUR 267	Nursing VII	4
NUR 268	Nursing VIII	3
NUR 269	Nursing IX	6
NUR 280	Nursing Seminar	2
	Total credit hours	109

## 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 fulltime 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 request with the Admissions Office to be placed on the waiting list.

Prior to entering, students must demonstrate math, reading and writing competency through the COMPASS placement tests. Any student who does not have an appropriate score on the respective test must complete the college preparatory (CPE or DEV) course with a "C" or better. In addition, students must complete all non-nursing courses and MST 181 or its equivalent prior to the fall quarter that the student is admitted into the PN program. The student is also required to present a current professional CPR card prior to taking LPN 160 or any subsequent clinical course.

#### Licensure

Upon completion of the program, the graduate may apply 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.

#### Health Requirements

Practical Nursing students must meet health requirements before they take LPN 160 Fundamentals of Nursing I.

#### 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.

#### Liability Insurance

Students will be billed for liability insurance for the clinical courses.

Course Number	Course Title	Credit Hours
Summer NUR 114 BIO 102 BIO 105	Dosage Calculations Medical Terminology Fundamentals of	1 3
ENG 111 ITS 12W PSY 111 PSY 221	Anatomy and Physiology English I Beginning Word Processing Psychology I Human Growth and Development I	4 4 1 3 3
Fall LPN 108 LPN 125 LPN 130 LPN 160	Nutrition and Diet Therapy Introduction to Disease Processes Nursing Trends I Fundamentals of Nursing I	2 4 2 6
Winter LPN 146 LPN 170 LPN 181 LPN 150	Pharmacology for Practical Nurses Fundamentals of Nursing II Women's Health and Obstetric Nursi Pediatric Nursing	4 7 ing 2 3
Spring LPN 133 LPN 191 LPN 195	Nursing Trends II Medical-Surgical Nursing Medical-Surgical Nursing II	2 10 4
	Total credit hours	65

## 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 position 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 fulltime 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.
- 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 and families from diverse cultures through the life cycle.
- use critical thinking and problem solving to draw logical conclusions.
- 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. 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 in the Admissions Office 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/DEV 061 and/or CPE 062/ DEV 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last five 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/DEV 091 and/or CPE 101/DEV 101). Students are excused from taking the math placement test if they have taken and 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 110, Fundamentals of Chemistry or its 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.

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.

#### 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 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.

#### Health Requirements

Registered Nursing students must meet health requirements before they take 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.

#### 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 clinical nursing (NUR) courses.

#### Liability Insurance

Students will be billed for liability insurance for each year of clinical courses.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number	Course Title	Credit Hours
Summer BIO 102 ENG 111 ITS 103	Medical Terminology English I Information Technology Basics	3 4 3
Summer or Fal NUR 114	Dosage Calculations	1
Fall NUR 170 BIO 121 ENG 112 PSY 111	Nursing I Anatomy and Physiology I English II Psychology I	6 4 4 3
Winter NUR 171 BIO 122 PSY 221 SOC 110	Nursing II Anatomy and Physiology II Human Growth and Development I Sociology	6 4 3 3
Spring NUR 172 BIO 123 BIO 131 PSY 230	Nursing III Anatomy and Physiology III Microbiology Abnormal Psychology	8 4 4 3
NUR 274 NUR 275 ENG 223	Nursing IV Nursing V Technical Report Writing Humanities Elective	5 5 3 3
Winter NUR 276	Nursing VI Humanities/Social Science Elective (G	11 A) 3
Spring NUR 267 NUR 268 NUR 269 NUR 280	Nursing VII Nursing VIII Nursing IX Nursing Seminar	4 3 6 2
m . 1	16. 1	1.00

108

Total credit hours

## 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 parttime 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.
- 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 and families from diverse cultures through the life cycle.
- use critical thinking and problem solving to draw logical conclusions.
- 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. 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 in the Admissions Office 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/DEV 061 and/or CPE 062/ DEV 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last five 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/DEV 091 and/or CPE 101/DEV 101). Students are excused from taking the math placement test if they have taken and 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 110, Fundamentals of Chemistry or its 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.

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.

#### 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 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.

#### Health Requirements

Registered Nursing students must meet health requirements before they take the first clinical nursing course. Secondyear students must update health requirements prior to taking clinical courses. Specific information will be presented at orientation after acceptance into the Registered Nursing program.

#### 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 clinical nursing (NUR) courses.

#### Liability Insurance

Students will be billed for liability insurance for each year of clinical courses.

#### Humanities/Social Science Electives

Course Number	Course Title	Credit Hours
Fall ENG 111 ITS 103 PSY 111	English I Information Technology Basics Psychology I	4 3 3
Winter ENG 112 PSY 221	English II Human Growth and Development I	4 3
Spring ENG 223 PSY 230	Technical Report Writing Abnormal Psychology	3
Summer BIO 102 BIO 131	Medical Terminology Microbiology	3 4
Fall BIO 121 SOC 110	Anatomy and Physiology I Sociology	4 3
Winter BIO 122 Humanit	Anatomy and Physiology II ies Elective	4 3
Spring BIO 123 Humanit	Anatomy and Physiology III ies/Social Science Elective (GA)	4 3
Fall NUR 114 NUR 170	Dosage Calculations Nursing I	1 6
Winter NUR 171	Nursing II	6
Spring NUR 172	Nursing III	8
Summer NUR 274 NUR 275	Nursing IV Nursing V	5 5
Fall NUR 276	Nursing VI	11
Winter NUR 267 NUR 268 NUR 269 NUR 280	Nursing VII Nursing VIII Nursing IX Nursing Seminar	4 3 6 2
	Total credit hours	108

## Office Administration

All students in Office Administration (OAD) take the same courses the first year. Beginning the second year, students elect to specialize in Office Administration or Medical Office Administration.

The program schedules that follow are designed for fulltime 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 degree in Office Administration, a graduate will be able to:

- produce business letters, memorandums, reports, forms, tables, and other business documents applying proper formatting, grammar, spelling and punctuation.
- file using alphabetic, numeric, geographic and subject
- perform routine office functions, including managing an office, working without supervision and establishing work priorities.
- demonstrate word processing functions using word processing software.
- use medical terms appropriately (Medical Office Administration only).
- compose business correspondence, research and write business reports, and deliver oral presentations.
- transcribe documents using transcribing machines.
- demonstrate good oral communication skills.
- demonstrate good customer service skills.
- exhibit an ability to think quickly on the job.

#### 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 wpm. 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 102, Keyboarding/Word Processing.

#### Humanities/Social Science Electives

A complete listing of humanities and social science electives is on page 5.

### Office Administration

Office administrators, often referred to as administrative professionals, function in a continually shifting role in a variety of office settings because of the availability of technology and the emphasis on greater efficiency and productivity. With this shifting role generally comes greater responsibil-

ity that is reflected in the duties of the administrative professional, which include researching and preparing reports, assisting with the planning and direction of the company through working with organizational teams, supervising support staff, administering computer networks, recommending computer software and upgrades, providing training, managing Websites and working with a variety of clientele. By performing their responsibilities well, administrative professionals may have opportunities for promotion to management positions.

Course Number	Course Title	Credit Hours
Fall OAD 101 OAD 105 ITS 103 MTH 106	Document Production I Business English Information Technology Basics Business Mathematics Social Science Elective	5 4 3 3 3
Winter OAD 102 OAD 130 COM 121 ENG 111 ITS 12A	Document Production II Advanced Grammar and Proofreading Effective Speaking English I Windows Concepts	5 4 3 4 2
Spring OAD 103 OAD 135 OAD 140 ENG 112 ENG 221	Document Production III Office Procedures Records Management English II Business Communications	4 4 3 4 3
OAD 245 ACC 111 COM 111 EBE 100 ITS 12D ITS 12P ITS 12S	Basic Machine Transcription Principles of Accounting I Interpersonal Communication Employability Skills Beginning Database Beginning Presentation Graphics Beginning Spreadsheet	4 4 3 2 1 1 1
Winter OAD 246 OAD 260 ENG 135 GPH 230 ITS 14S	Advanced Machine Transcription Office Simulation Business Report Writing Introduction to Web Design Intermediate Spreadsheet	4 5 4 3 2
Spring OAD 200 OAD 285 ITS 14D ITS 14P	Administrative Office Management Co-op Education Intermediate Database Intermediate Presentation Graphics Humanities/Social Science Elective	3 2 2 2 3
	Total credit hours	100

## Medical Office Administration Major

Medical office administrators, often referred to as medical administrative professionals, 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 administrative professionals must possess expertise in medical terminology, familiarization with medical references, knowledge of medical coding and familiarization with HIPPA regulations. Strong human relations skills are also important as medical administrative professionals deal with people in stressful situations. By performing their responsibilities well, medical administrative professionals may have 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 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 102, Keyboarding/Word Processing.

Humanities/Social Science Electives

A complete listing of humanities and social science electives is on page 5.

Course Number		Credit Hours
Number	Tille	Hours
Fall		
OAD 101	Document Production I	5
OAD 105	Business English	4
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3 3 3
	Social Science Elective	3
147: 1		
Winter OAD 102	Document Production II	5
OAD 102 OAD 130	Advanced Grammar and Proofreading	
COM 121	Effective Speaking	3
ENG 111	English I	4
ITS 12A	Windows Concepts	2
	•	
Spring		
OAD 103	Document Production III	4
OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II or	
ENG 135	Business Report Writing*	4
ENG 221	Business Communications	3

Fall		
OAD 248	Basic Medical Machine Transcription	4
BIO 102	Medical Terminology	3
BIO 105	Fundamentals of	
	Anatomy and Physiology	4
EBE 100	Employability Skills	2
ITS 12D	Beginning Database	1
ITS 12P	Beginning Presentation Graphics	1
ITS 12S	Beginning Spreadsheet	1
Winter		
OAD 249	Advanced Medical Machine Transcription	
OAD 256	8	4
OAD 270	CPT - Coding	5
COM 111	Interpersonal Communication	3
C :		
Spring OAD 272	ICD-9-CM Coding	5
OAD 285	Co-op Education	2
	MGT or ITS Elective*	3
	Humanities/Social Science Elective	3
	Transaction Scient Sciented Elective	9
	Total credit hours	99

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

#### 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 Office Administration or the Medical Office Administration associate degree programs. This certificate can be earned through a combination of evening and on-line courses.

Course Number	Course Title	Credit Hours
Fall OAD 101	Document Production I	5
OAD 105 ITS 103	Business English Information Technology Basics	4
MTH 106	Business Mathematics	3
	Social Science Elective	3
Winter		
OAD 102	Document Production II	5
OAD 130	Advanced Grammar and Proofreading	5 4
COM 121	Effective Speaking	3
ENG 111	English I	4
ITS 12A	Windows Concepts	2

<sup>\*\*</sup>Students are required to take three credit hours of MGT or ITS courses not already prescribed. ITS 080, ITS 12W, ITS 14W and ITS 102 will not count toward graduation requirements.

Spring		
OAD 103	Document Production III	4
OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II	4
ENG 221	Business Communications	3
	Total credit hours	54

## Office Administration Departmental Certificates

Four 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.

#### Communications Certificate

Course	Course	Credit
Number	Title	Hours
OAD 105	Business English	4
OAD 130	Advanced Grammar and Proofreading	5 4
COM 111	Interpersonal Communication	3
COM 121	Effective Speaking	3
ENG 111	English I	4
ENG 135	Business Report Writing	4
ENG 221	Business Communications	3
	Total credit hours	25

## Machine Transcription Certificate

Course Number	Course Title	Credit Hours
OAD 101 OAD 105 OAD 130 OAD 245 OAD 246	Document Production I Business English Advanced Grammar and Proofreading Basic Machine Transcription* Advanced Machine Transcription	5 4 4 4 4
	Total credit hours	21

## Medical Coding Certificate

	<b>9</b>	
Course Number	Course Title	Credit Hours
BIO 102 BIO 105	Medical Terminology Fundamentals of Anatomy	3
	and Physiology	4
OAD 270	CPT - Coding	5
OAD 272	ICD-9-CM Coding	5
	Total credit hours	17

## **Medical Transcription Certificate**

Course Number	Course Title	Credit Hours
OAD 101 OAD 248 OAD 249 BIO 102 BIO 105	Document Production I Basic Medical Machine Transcription Advanced Medical Machine Transcrip Medical Terminology Fundamentals of Anatomy and Physiology	
	Total credit hours	21

\*A student can take OAD 245 or OAD 248 concurrently with OAD 101 if he or she can type at least 35 nwpm and knows Microsoft Word to a level equivalent to ITS 102 or ITS 12W. Please see the Dean of Business and Applied Technologies for a wavier. A Medical Transcription student with strong grammar skills can also ask the dean to waive OAD 105 and OAD 130 as a prerequisite for OAD 248.

# 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.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 5.

Course Number	Course Title	Credit Hours	
Fall PHO 111 MGT 105 ENG 111	Photography I Introduction to Business English I Humanities/Social Science Elective	3 3 4 3	
Winter PHO 112 ART 130 COM 111 PHO 130	Photography II Appreciation of the Arts Interpersonal Communication Digital Photography I	3 3	3
Spring PHO 121 ART 135 ENG 112 PSY 111 PHO 131	Color Photography I Art History III English II Psychology I Digital Photography II	3 3 4 3 3	
Summer PHO 122 PHO 124 PHO 180	Color Photography II Photography Portfolio Photography Practicum Total credit hours	4 4 3	

#### 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.

# 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 program schedule that follows is designed for fultime 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 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

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 Admissions Office to be placed on the admission list or waiting list, if the admission list is closed.

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/DEV 061 and/or CPE 062/DEV 062). Students are excused from taking the reading placement test if they have taken the ACT or SAT exam within the last five 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 20 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 five 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 recent 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).
- students who do not complete Anatomy and Physiology I prior to entering the program must be prepared to take it in the fall concurrent with Muscle Anatomy (BIO 118). Students must have completed all pre-requisites required for Anatomy and Physiology I (BIO 121) prior to petitioning for admission into the program. Please review the PTA Petitioning Handbook or contact your physical therapist assistant advisor for further information about these requirements.
- a GPA of greater than or equal to 2.0 in the courses pertaining to the identified physical therapist assistant major.

In order to be accepted into the physical therapist assistant courses, students must maintain a 2.0 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 (DEV/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 a 2.0 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-PTA courses in the curriculum. (Muscle Anatomy, BIO 118 and Biomechanics, BIO 230 are considered 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 will result in removal from the admission list. Please review the PTA Petitioning Handbook or contact your physical therapist assistant advisor for further information about these requirements.

Entry into physical therapy assistant courses occurs once a year in the fall. Initial acceptance letters for fall entry are mailed out once the applicant's information has been reviewed and verified. Applicants are then 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.

#### Learning Outcomes

Upon completion of an associate degree in Physical Therapist Assistant Technology, graduates will be able to:

- demonstrate skill in implementing treatment practices to complete a comprehensive treatment plan.
- demonstrate skill in utilizing testing and measurement techniques appropriate to the plan of care established by the physical therapist.
- implement effective communication when working with patients, families, colleagues, and other health care providers.
- work in an ethical, legal, safe and effective manner under the supervision of a physical therapist.
- apply appropriate role utilization in the physical therapy delivery system.
- 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.

#### Health Requirements

A physical exam, a two-step Mantoux test, Hepatitis B immunization or waiver, a health history including record of childhood immunizations or adult titers, fingerprinting, professional CPR and First Aid training are required prior to beginning the second year. 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

Course Number	Course Title	Credit Hours
PTA 110 PTA 120 BIO 102 BIO 118 BIO 121 ENG 111 ITS 103	PTA Survey Introduction to Patient Management Medical Terminology Muscle Anatomy Anatomy and Physiology I English I Information Technology Basics	3 2 3 2 4 4 3
Winter PTA 145 BIO 122 BIO 230 ENG 112 PSY 111	PTA Procedures I Anatomy and Physiology II Biomechanics English II Psychology I	4 4 4 4 3
Spring PTA 146 PTA 160 BIO 123 PSY 221	PTA Procedures II PTA Rehabilitation I Anatomy and Physiology III Human Growth and Development I	5 6 4 3
Summer PTA 241 PSY 222	PTA Procedures III Human Growth and Development II Humanities/Social Science Elective	5 3 3
PTA 260 PTA 281 PTA 291 COM 111	PTA Rehabilitation II Directed Practice I Seminar I Interpersonal Communication	6 3 2 3
Winter PTA 265 PTA 270 PTA 282 PTA 292 ENG 223	PTA Rehabilitation III PTA Trends and Issues Directed Practice II Seminar II Technical Report Writing Humanities/Social Science Elective	6 2 3 2 3 3
Spring PTA 283 PTA 293	Directed Practice III Seminar III	6 2
	Total credit hours	110

# Realtime Reporting Judicial Reporting

Judicial reporters record the verbatim proceedings of a courtroom, deposition, hearing, arbitration, or meeting and provide an accurate transcript of the proceedings.

Clark State 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 fultime 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 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 and 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 102, Keyboarding/Word Processing.

Entering students must be high school graduates or possess a certificate of general education (GED).

#### Graduation Requirements

The Realtime 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.

Clark State Community College reserves the right to change these standards when determined educationally expedient.

#### Humanities/Social Science Electives

Course Number	Course Title	Credit Hours
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 Trans	3
RTR 152	Realtime Transcription	2
ENG 111	English I	4
ENG 221	Business Communications	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 RTR 151 BIO 102	Beginning Testimony II Realtime Transcription Medical Terminology Humanities Elective Social Science Elective Humanities/Social Science Elective (GA)	3 1 3 3 3 3
	RJR 211 RJR 231 RTR 101 RTR 153	Advanced Testimony I Jury Charge I Advance Speed Building I Realtime Transcription Humanities/Social Science Elective	3 3 3 3
-	Winter RJR 212 RJR 232 RJR 245 RTR 132 RTR 153 RTR 202	Advanced Testimony II Jury Charge II Office Management Advanced Computer Assisted Transcription Realtime Transcription Advanced Speed Building II	3 3 3 3 3
	Spring RJR 213 RJR 233 RTR 153 RTR 203 RJR 280	Advanced Testimony III Jury Charge III Realtime Transcription Advanced Speed Building III Judicial Reporting: The Professional Experience	3 3 3 3
		Total Credit Hours	110

### **Broadcast Captioning/CART Option**

Broadcast captioners capture the spoken word on television shows 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 television studio itself 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 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, 200 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 102, Keyboarding/Word Processing.

Entering students must be high school graduates or possess a certificate of general education (GED).

#### Graduation Requirements

- 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 200 wpm literary.
- Produce a five-page, first-pass transcript with at least 96 percent accuracy.

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 5.

Course Number	Course Tille	Credit Hours
Fall RTR 105 RTR 110 RTR 125 ITS 103 OAD 105	Realtime Theory Survey of Realtime Reporting Vocabulary and Reference Use Information Technology Basics Business English	7 1 2 3 4
Winter RTR 106 RTR 107 RTR 131 RTR 152 ENG 111 ENG 221	Realtime Theory Reinforcement Beginning Speed Building I Beginning Computer Assisted Trans Realtime Transcription English I Business Communications	2 3 3 2 4 3
Spring RTR 108 RTR 111 RTR 120 RTR 152 ENG 112	Beginning Speed Building II Beginning Testimony I Law and Legal Terminology Realtime Transcription English II	3 3 2 2 4
Summer RTR 112 RTR 151 BIO 102 GLG 110 PLS - Politic SOC 110	Beginning Testimony II Realtime Transcription Medical Terminology Earth Science al Science Elective Sociology	3 1 3 4 3 3
Fall RCC 110 RCC 211 RTR 151 RTR 201 ENG 250	Introduction to Deaf Community Captioning/CART I Realtime Transcription Advanced Speed Building I American Literature	4 3 1 3 3
Winter RCC 212 RCC 245 RTR 132 RTR 151 RTR 202 CHM 110	Captioning/CART II Business Practices Advanced Computer Assisted Transcription Realtime Transcription Advanced Speed Building II Fundamentals of Chemistry	3 2 3 1 3 5
Spring RCC 213 RCC 280 RCC 281 RTR 151 RTR 203 GEO 220 HST 123	Captioning/Cart III Captioning: The Professional Experie CART: The Professional Experience Realtime Transcription Advanced Speed Building III World Regional Geography American History 1900 - Present	3 ence 5 5 1 3 3 3
	Total Credit Hours	110

## **Social Services** Social Services

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 fulltime 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:

- adhere to a professional code of ethics in working with clients.
- · demonstrate effective oral and written communication skills.
- complete professional documentation reports, including progress notes, psycho/social histories and mental status evaluations, as well as other professional documentation.
- demonstrate an awareness of personal biases, values, attitudes and their effect on clients.
- demonstrate professional behaviors.
- apply the roles of the social services practitioner/chemical dependency counselor in practice.

#### 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, ITS 103 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 5.

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Course Number	Course Title	Credit Hours
SWK 100 SWK 105 ENG 111 ITS 103 PSY 111	Intro to Social Welfare and Social Welfare Chemical Dependency I English I* Information Technology Basics* Psychology I	ork*4 4 4 3 3
Winter SWK 121 ENG 112 PSY 221 SOC 110	Social Work Methods and Procedures English II Human Growth and Development I Sociology Humanities/Social Sciences Elective (	4 3 3
Spring SWK 136 BIO 110 ENG 223 PSY 222 SOC 240	Affective Education Fundamentals of Human Biology Technical Report Writing Human Growth and Development II Racial and Cultural Minorities	4 4 3 3 3
SWK 231 SWK 271 SWK 291 PSY 230	General Practice/Crisis Intervention Social Service Practicum I** Social Service Seminar I** Abnormal Psychology Technical Elective**	3 2 2 3 3
Winter SWK 232 SWK 236 SWK 272 SWK 292	Generalist Practice with Families Case Management Social Services Practicum II Social Services Seminar II Humanities/Social Science Elective	3 5 2 2 3
Spring SWK 130 SWK 238 SWK 273 SWK 293	Social Policy and Service Social Work and Group Work Social Services Practicum III Social Services Seminar III Technical Elective***	4 3 2 2 3

Total credit hours

- \* ENG 111, ITS 103 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 215, SWK 218, SWK 220 and SWK 297.

## **Social Services Departmental Certificates**

A departmental certificate is available for students to meet requirements for the Ohio Credentialing Board. This certificate can be applied for by filling out the certificate application form in the Health and Human Services Division Office in the Applied Science Center.

## **Chemical Dependency**

This certificate is focused on providing 110 clock hours toward the required 5000 hours that must be earned to become a certified chemical dependency counselor. (SWK 205 and SWK 215 are also technical electives for the Social Work degree.)

Course Number	Course Title	Credit Hours
SWK 105 SWK 205 SWK 215	Chemical Dependency I Chemical Dependency II Special Populations in	4
	Chemical Dependency	3
	Total credit hours	11

# 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 developmental requirements. 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.

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) \*, Theatre History I (THE 270), 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

Effective Fall Quarter 2001, all new students entering the College for the first time pursuing either an AA or AS degree, are now 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 the specific AA/AS program goals.

#### **Option One - Performance Theatre**

Concentration (15-17 credit hours)

Acting I (THE 202)\*, Acting II (THE 203), Speech and Voice for Actors (THE 107), Dance and Movement for Actors (DAN 140) and Acting III (THE 204)

Electives (15-17 credit hours)

Children's Theatre (THE 160), Theatre History II (THE 271), 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 Nonmajor (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

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.

# 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	Credit
Number	Title	Hours
THE 111	Stagecraft I	4
THE 130	Introduction to Theatre*	3
THE 230	Theatre Management	3
THE 270	Theatre History I* or	
THE 271	Theatre History II*	4
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

<sup>\*</sup>Humanities elective meeting Global Awareness requirement.

<sup>\*</sup>Take during the first quarter at Clark State.

<sup>\*\*</sup>Up to 6 credit hours may be taken for degree credit.



College Clark State

Take a closer look! Find out more about courses in your program and get an overview of what you can expect to learn at Clark State.

Clark State Community College GET SMART.

#### 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; and bank reconciliation. Prerequisite(s): DEV 061 or 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, and differential analysis.

Prerequisite(s): ACC 111, 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 windowsbased accounting software. Includes study of both service and merchandising businesses.

Prerequisite(s): ACC 111 or instructor permission

#### ACC 205 Spreadsheet Accounting (3)

Basic accounting applications applied using Microsoft Excel. Financial statement preparation, aging of accounts receivable, loan amortization, ratio analysis, payroll, depreciation, and fixed assets covered. Sorting, filtering, and 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 noncost valuation procedures. Non-current 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): DEV 061 or 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 personal property, sales, and franchise 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, and student responsibilities; and industry expectations.

Prerequisite(s): DEV 061 or 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): DEV 061 or 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): DEV 101 or placement test score, 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): DEV 061 or CPE 061

Lab Fee: S25

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): DEV 061 or 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, and care and culture of landscape plants utilizing a variety of learning resources.

Prerequisite(s): DEV 061 or 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or CPE 061

AGR 185 Vehicle Operation and Management (3)

Operating principles, safety, and maintenance of transport equipment utilized in various agricultural/horticultural businesses.

Prerequisite(s): Agribusiness and Horticulture Majors Only

Corequisite(s): AGR 104

Lab Fee: \$12

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): CPE 061 or DEV 061

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): DEV 061 or CPE 061

AGR 193 Horticulture Co-op Experience I (3)

Co-op work experience in chosen 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/or written reports of the experience required.

Prerequisite(s): AGR 104

AGR 194 Agribusiness Co-op Experience I (4)

Co-op work experience in chosen 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/or written reports of the experience required.

Prerequisite(s): AGR 104

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): DEV 061 or 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or CPE 061

Lab Fee: \$15

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): DEV 061 or 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 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): DEV 061 or CPE 061

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 293 Horticulture Co-op Experience II (3)

A second co-op work experience in chosen 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/or written reports of the experience required.

Prerequisite(s): AGR 104, AGR 193

AGR 294 Agribusiness Co-op Experience II (4)

A second co-op work experience in chosen 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/or written reports of the experience required.

Prerequisite(s): AGR 104, AGR 194

#### AGR 295 Agriculture Capstone Seminar (3)

Application of knowledge and skills learned in previous coursework and industry experience. Use of problemsolving skills to respond to a series of real world industry scenarios. Off-site casework may be required.

Prerequisite(s): 45 hours of technical coursework including, AGR 193 or AGR 194, AGR 151, and AGR 284.

#### 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: \$12

#### 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

#### (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): DEV 061 or 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): DEV 061 or CPE 061 and DEV 071 or 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): DEV 061 or CPE 061 and DEV 071 or CPE

071 or appropriate Compass score

Corequisite(s): ENG 111

#### ART 134 Art History II (3)

Survey of visual art from late medieval times to beginnings of the modern era.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or CPE

071 or appropriate Compass score

Corequisite(s): ENG 111

#### ART 135 Art History III (3)

Survey of visual art during post impressionist to modern era. Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

#### ART 138 Arts of Africa (3)

General survey course to enhance the student's understanding and appreciation of traditional African art and culture as reflected in the visual arts. Focus on visual arts and other interrelated art forms such as music, dance, and drama also discussed as transmitters of traditional cultural values.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or 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

#### (Bio) Biology

BIO 102 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 to 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): DEV 061 or CPE 061 or appropriate Compass

score

BIO 105 Fundamentals of Anatomy and Physiology (4)

The human body's structure and function with emphasis on major body systems.

Prerequisite(s): DEV 061 or 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, and growth and development. Aging, diseases and disorders included.

Prerequisite(s): CPE 061 and CPE 091

Lab Fee: \$40

#### BIO 111 Biology I (4)

Cell biology and genetics. Cellular molecules, cellular anatomy, cellular processes, including respiration, photosynthesis, and cellular reproduction. Mendelian and molecular genetics.

Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass score, High School Chemistry, or instructor permission Lab Fee: \$40

BIO 112 Biology II (4)

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): DEV 061 or CPE 061

Lab Fee: \$40

BIO 113 Biology III (4)

The human as an organism; a comparative look at structure, function, and behavior.

Prerequisite(s): DEV 061 or CPE 061

Lab Fee: \$40

#### BIO 118 Muscle Function (2)

Study of skeletal structure and function and the origin, insertion, and action of trunk and extremity muscles. Introduction to palpation and muscle function during activities. Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass score

Corequisite(s): BIO 102, BIO 121, PTA 120

BIO 121 Anatomy and Physiology I (4)

Human cells, tissues, skin, bones, muscles, nervous system

cells, and autonomic nervous system.

Prerequisite(s): CHM 110 Corequisite(s): BIO 102

Lab Fee: \$25

BIO 122 Anatomy and Physiology II (4)

Human circulatory, respiratory, urinary, digestive systems, acid-base and fluid and electrolyte balance, and metabolism.

Prerequisite(s): BIO 102, BIO 121

Corequisite(s): NONE

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.

 $Prerequisite (s): DEV\,061\,or\,CPE\,061\,or\,appropriate\,Compass$ 

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): DEV 061 or CPE 061 and DEV 071 or CPE

171 or appropriate Compage score

071 or appropriate Compass score

Corequisite(s): ENG 111

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 and gait analysis. Laboratory practice.

Prerequisite(s): BIO 118, BIO 121, PTA 120

Corequisite(s): BIO 122, PTA 145

Lab Fee: \$15

#### (CHM) Chemistry

CHM 110 Fundamentals of Chemistry (5)

Concepts in chemistry for students requiring only one chemistry course for their major. 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.

Prerequisite(s): DEV 061 or CPE 061 and DEV 101 or 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): DEV 061 or CPE 061 & DEV 103 or CPE 103 or appropriate Compass score, For MLT Students only: DEV 061 or CPE 061, DEV 101/CPE101 for MLT students

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.

\*Indicates objectives pertinent to the laboratory portion of the course as well as the lecture.

Prerequisite(s): DEV 061/CPE 061, DEV 103/ CPE 103 or appropriate Compass score. For AS Students DEV 103 or

appropriate Compass score. For AS Students DEV 103 or 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. \*Indicates objectives pertinent to the laboratory portion of the course as well as the lecture.

Prerequisite(s): DEV 101 or 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.

Prerequisite(s): DEV 071 or CPE 071 or appropriate Compass score & CHM 115 or high school chemistry and passing chemistry placement test, DEV/CPE 103, or appropriate 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).

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: thermodynamics, electrochemistry, main group chemistry, coordination chemistry, solid state chemistry, nuclear chemistry, organic chemistry, and biochemistry.

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.

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, and organic synthesis of polymers.

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.

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): DEV 061 or CPE 061 or appropriate Compass

Corequisite(s): CPE 071

#### COM 121 Effective 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.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or 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, photojournalism, and allied topics as well as the analysis of forces and institutions affecting media behavior, and the resulting quality of performance.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or 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 Effective 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

#### (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.

 $Prerequisite (s): DEV\,061\,or\,CPE\,061\,or\,appropriate\,Compass$ 

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; and 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, and 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) Comprehension

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 DEV 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 you for the writing abilities and requirements of English 111 and 112 as well as the specific writing needs for your individual areas of concentrated study. The course attempts to improve sentence and writing skills by combining exercises in grammar/mechanics and weekly writing assignments. Development of topic and ideas to support topic sentences in an organized and coherent manner will also be covered. Institutional credit only.

Prerequisite(s): Writing Placement Test result below the CSCC standard

#### 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 (with applications), operations with polynomials and factoring. Institutional credit only.

Prerequisite(s): Algebra Placement Test score below the CSCC standard

#### CPE 102 Introductory Algebra II (4)

Topics include rational expressions, equations containing rational expressions (with applications), graphs of points and lines, slope and linear systems in two variables. Institutional credit only

Prerequisite(s): 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 Intro to Criminal Justice (4)

Overview of the criminal justice system's history, development, and evolution, including subsystems of police, courts, and corrections.

Prerequisite(s): DEV 061 or 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): DEV 061 or CPE 061 or appropriate Compass

#### 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): DEV 061 or CPE 061 or appropriate Compass score

Lab Fee: \$15

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): DEV 061 or 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or CPE 061 or appropriate Compass

#### CRJ 216 Community Relations (3)

The development of skills to resolve communication problems between citizens and the police.

Prerequisite(s): DEV 061 or 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or CPE 061 or appropriate Compass score

#### CRJ 230 Social Justice (3)

Exploration of job stresses; the social values and ethics of the criminal justice process.

Prerequisite(s): DEV 061 or 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): DEV 061 or 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): DEV 061 or CPE 061 or appropriate Compass score

#### CRJ 250 Community Resources (3)

A service learning class where the student will participate weekly in two (2) hours of seminar discussion and eight (8) hours 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): DEV 061 or CPE 061 or appropriate Compass

#### 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, ĈRJ 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: \$515

Student Liability Insurance: \$15

#### 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: \$515

#### (CSD) Computer Software Development

CSD 104 Programming Fundamentals (5)

Fundamental programming constructs and concepts. Study of variables, constants, looping, strings, flowcharting basics, programming logic, and data validation techniques.

Introduction to object-oriented programming.

Prerequisite(s): Knowledge level equivalent to ITS 080,

keyboarding skills; CPE 061

Lab Fee: \$15

#### CSD 114 Visual Basic Programming (5)

Knowledge and skills needed to develop Microsoft.NETbased applications using Visual Basic. NET. Utilize framework goals of the .NET architecture. Extend traditional Visual Basic application to take advantage of the language's enhancements.

Prerequisite(s): CPE 091, CSD 104

Lab Fee: \$20

#### CSD 119 Programming with ADO.NET (5)

Knowledge and skills needed to build data-centric applications and web services. Integration of MS ADO.NET, SQL server, and the .NET framework.

Prerequisite(s): CPE 101, CSD 114

Lab Fee: \$15

#### 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 instructor permission 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 instructor permission

Lab Fee: \$10

#### CSD 201 Oracle Database Development I (5)

Emphasizes client/server database architecture. Integration of content and theory with tutorial exercises.

Prerequisite(s): ITS 110

Lab Fee: \$20

#### CSD 202 Oracle Database Development II

Database development activities using SQLL commands. PL/SQL programming. Advanced Forms Builder and Reports.

Prerequisite(s): CSD 201

Lab Fee: \$20

#### CSD 208 Programming XML Web Services (3)

Knowledge and skills needed to develop XML Web Services. Build, deploy, locate, and consume Extensible Markup Language (XML) Web Services. Focus on MS Visual Studio, MS ASP, and Universal Description, Discovery, and Integration

Prerequisite(s): CSD 119, ITS 108

Lab Fee: \$20

#### CSD 216 C Concepts I (5)

Knowledge and skills needed to develop C# applications for the Microsoft.NET Platform. Focuses on C# program structure, language, syntax, and implementation details. oriented and type-safe programming language concepts. Prerequisite(s): CSD 104 or instructor permission

Lab Fee: \$20

#### CSD 217 C Concepts II (5)

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 216

Lab Fee: \$20

#### 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): None

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): 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 such as HTML, XML, JavaScript, CSS (Cascading Style Sheets), and DOM (Document Object Model). Standard programming language concepts and actual publishing of web pages. Creation of an e-commerce site.

Prerequisite(s): CSD 208

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. 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. Barre, center floor, traveling sequences each class.

Prerequisite(s): DAN 111, DAN 112

#### DAN 120 Modern Dance I (3)

Fundamental movement principles demonstrating body awareness and alignment. 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 Corequisite(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 140 Dance & Movement for Actors (3)

Movement principles for actors. Body alignment, weight transference, simple movements, and movement combinations. Prerequisite(s): none

#### 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 16<sup>th</sup> Century through the 20<sup>th</sup> 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): DEV 061 or 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 full size and at scale as required.

Prerequisite(s): DFT 101 or two years high school 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 parmetric 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): DEV 061 or 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

Corequisite(s): EBE 287

#### 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 287 Co-Op Seminar I (2)

Discussion of workplace experiences relating to classroom theory and practice to the work environment.

Prerequisite(s): DEV 061 or CPE 061

Corequisite(s): EBE 282

#### 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 EBE 284, 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

#### EBE 297 Co-Op Seminar II (2)

Discussion of workplace experiences relating classroom

Discussion of Workplace of the work environment. Prerequisite(s): DEV 061 or CPE 061
Corequisite(s): EBE 292

(ECE) Early Childhood Education
ECE 101 Professional Development for Educators (1)

Criteria for per Explore professional development options. Examine own potential learning style and study needs. Criteria for performance-based assessment for beginning teachers. (PRAXIS)

Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass

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

Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass

score

Corequisite(s): ECE 101

Lab Fee: \$30

Student Liability Insurance: \$20

#### ECE 106 Observing Young Children (2)

Observing and recording the behaviors of young children in early childhood settings. Develop objectives based on observed individual needs using a variety of observation tools. Center observation required.

Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass

score

Corequisite(s): ECE 102

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, and health and safety aspects of group care for infants and toddlers.

Prerequisite(s): ECE 102, DEV 061 or CPE 061 or appropriate Compass score

Lab Fee: \$25

#### ECE 112 Resources in Early Childhood Education (4)

Making teaching materials and audiovisuals; becoming aware of early childhood technology as well as free or inexpensive material. Examination of cost, storage, and use of materials. Exploring community and professional organizations; communication with parents and field trips.

Prerequisite(s): ECE 102, DEV 061 or CPE 061 or appropriate

Compass score Lab Fee: \$35

#### 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): DEV 061 or CPE 061 or appropriate Compass score

Lab Fee: \$35

#### 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): DEV 061 or CPE 061 or appropriate Compass score

Corequisite(s): ECE 102

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 8 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

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 prekindergarten/schoolage child.

Prerequisite(s): ECE 102, DEV or 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.

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 $Prerequisite (s): DEV\,061\ or\ CPE\,061\ or\ appropriate\ Compass$ 

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, DEV 061 or CPE 061 or appropriate

Compass score Lab Fee: \$25

#### ECE 217 Special Needs Child (4)

Early childhood education and the special needs child; curriculum for the individual child with special needs; family needs and concerns; community, state and federal assistance; and licensing regulations.

Prerequisite(s): ECE 102, ECE 110

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.

 $Prerequisite (s): Dev\,061\,or\,CPE\,061\,or\,appropriate\,Compass$ 

score

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): DEV 061 or CPE 061 or appropriate Compass

score

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.

 $Prerequisite(s): DEV\,061\,or\,CPE\,061\,or\,appropriate\,Compass$ 

score

Lab Fee: \$25

#### ECE 223 Preschool Curriculum and Instruction (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, ECE 110, ECE 120

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 110, PSY 221

Lab Fee: \$25

ECE 225 Professional, Legal, and 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): DEV 061 or 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

Prerequisite(s): ECE 102, ECE 110

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, DEV 061 or 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

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 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

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 291

Corequisite(s): ECE 225, ECE 230, ECE 283

#### (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): DEV 061 or CPE 061 and DEV 071 or 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

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

#### (EEP) Education

EEP 110 Teaching in American Schools (3)

Acquaint prospective teachers with teaching profession and structure of American schools. Examine issues in public education. Examine history of education and current issues of teaching in American schools.

Prerequisite(s): ECE 102, ECE 101, DEV 061 or CPE 061 or

appropriate Compass score

Lab Fee: \$25

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, DEV 061 or CPE 061 or

appropriate Compass score

Lab Fee: \$25

EEP 152 Positive Guidance in the Elementary Classroom (3)

Exploration of school, classroom and individual approaches to positive behavioral support in the elementary setting. Functions of behavior, techniques of intervention, and intervention strategies. Six hours of school observation required.

Prerequisite(s): ECE 102, ECE 101, DEV 061 or 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 DEV 061 or appropriate Compass score, ECE 102, ECE 101 or instructor permission

Lab Fee: \$25

EEP 205 Elementary Curriculum Planning and Delivery (3)

Examination of all aspects of curriculum planning and implementation.

Prerequisite(s): ECE 102, ECE 101, ECE 120

Lab Fee: \$25

EEP 216 Technology for Educators (3)

Computer technology for Pre-K-12 educators, data collection in classrooms, and adaptive and assisted learning. Basic audio-visual equipment, digital cameras, and recordings.

Prerequisite(s): ITS 103

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, EEP 152, EEP 205

Lab Fee: \$25

#### (EMS) Emergency Medical Services

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): EMS 171 or Current Basic Life Support for

Health Care Providers Certification

Lab Fee: \$20

Student Liability Insurance: \$62

#### EMS 101 Paramedic Theory/Practice I (7)

Introduction to emergency medical services advanced life support following Division I, II, III, V, and VIII of the EMT-Paramedic national standard training curricula. Includes pre-hospital environment, an overview of roles and responsibilities, EMS systems, medical/legal aspects, therapeutic communications, rescue operations, major incident response, stress management in emergency services, advanced patient assessment, advanced airway management, IV therapy and shock resuscitation, emergency pharmacology, and introduction to cardiac emergencies. Includes college practical skills laboratory.

Prerequisite(s): Ohio EMT Basic Certification, BIO 102, BIO

105

Corequisite(s): EMS 112

Lab Fee: \$75

#### EMS 102 Paramedic Theory/Practice II (7)

Applies Paramedic Theory/Practice I. Integrates Division V, of the EMT-Paramedic national standard training curricula. Division V (Medical): Cardiology, Neurology, Endocrinology, Allergies & Anaphylaxis, Gastroenterology, Urology, Toxicology, Environmental Conditions, Infectious and Communicable Diseases, Behavioral & Psychiatric Disorders, Gynecology and Obstetrics, Pediatrics, and Geriatrics. Includes college practical skills laboratory.

Prerequisite(s): EMS 101, EMS 112 or EMS 104, EMS 113

Corequisite(s): EMS 114, EMS 120

Lab Fee: \$75

EMS 104 EMT Intermediate Theory/Practice (7)

Meets current standards of National Curriculum of EMT Intermediate. Recognizing nature and seriousness of patient's condition and/or extent of injuries, administering appropriate advanced level care utilizing basic principles of pharmacology, developing drug profiles for common emergency medications. Practical skills laboratory. Successful students will be eligible to sit for Ohio's EMT Intermediate certification testing. Prerequisite(s): EMS 100, Ohio EMT Basic Certification

Corequisite(s): EMS 113

Lab Fee: \$65

#### EMS 105 Paramedic Theory/Practice III (7)

Applies Paramedic Theory/Practice I and Paramedic Theory/Practice II and integrates application of theory in a case study format, including case scenario presentations and role play situations, emphasizing critical thinking and decision making. Gives the student the ability to apply knowledge handling life threatening and non-life threatening emergency situations. Includes an overview of divisions I through VI of the EMT-Paramedic national standard training curriculum and practical skills evaluation in a college laboratory setting.

Prerequisite(s): EMS 102, EMS 114, EMS 120

Corequisite(s): EMS 116, EMS 122

Lab Fee: \$65

#### EMS 110 Health and Health Emergencies (3)

Consideration of selected health conditions and issues; recognition of health emergencies; and demonstration of assistive measures.

Prerequisite(s): Permission of instructor

Lab Fee: \$20

#### EMS 112 Hospital Practice I (1)

Beginning of the hospital 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.

Prerequisite(s): BIO 102, BIO 105, Ohio EMT Basic Certification

Corequisite(s): EMS 101 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): Ohio EMT Basic Certification

Corequisite(s): EMS 104

Student Liability Insurance: \$62

## EMS 114 Hospital Practice II (2)

Intermediate phase of the hospital clinical practice in the hospital setting observing and practicing skills evaluated in the college laboratory. Includes emergency department, IV therapy team, respiratory therapy, pediatrics, intubation in the operating room, cardiac skills, advanced cardiac life support, and pre-hospital trauma skills.

Prerequisite(s): EMS 101, EMS 112 or EMS 104, EMS 113

Corequisite(s): EMS 102, EMS 120

#### EMS 116 Hospital Practice III (2)

Advanced phase of the hospital 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, cardiac skills, advanced cardiac life support, pre-hospital trauma skills, assessment and management medical emergencies and behavioral emergencies rotating through more specialized facilities completing hospital clinical requirements.

Prerequisite(s): EMS 102, EMS 114, EMS 120

Corequisite(s): EMS 105, EMS 122

#### EMS 120 ALS Field Observation I (1)

Beginning level of ambulance experience with a paramedic team, allowing the student to observe the daily responsibilities of the paramedic, and giving the student the opportunity to run on EMS calls, progressing from an observation role to a participant role with the Advanced Life Support team. Prerequisite(s): EMS 101, EMS 112 or EMS 104, EMS 113

Corequisite(s): EMS 102, EMS 114

#### EMS 122 ALS Field Observation II (1)

Continuation of ambulance experience with a paramedic team, allowing the student to observe the daily responsibilities of the paramedic, and giving the student the opportunity to run on EMS calls progressing from an observation role to a participant/leadership role with the Advanced Life Support

Prerequisite(s): EMS 102, EMS 114, EMS 120

Corequisite(s): EMS 105, EMS 116

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): DEV 061 or CPE 061 or appropriate Compass

score 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): EMS 105 or 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): EMS 105 or EMT-P Certification or Instructor Permission

#### EMS 230 EMS Supervision (3)

Development of skills for managing, coordinating, implementing and evaluating personnel, equipment, budget, staffing and other facets of Emergency Medical Services Systems.

Prerequisite(s): Ohio 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 280 Advanced Rescue (4)

Safety factors and advanced techniques used when caring for victims exposed to injury in various extraordinary and hazardous situations. Skills are emphasized through practical application using protective gear and various equipment. Prerequisite(s): Ohio EMS Basic Certification

Lab Fee: \$50

#### 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 101, EMS 102, EMS 105. 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, minimum of 2 years critical care, TNCC, Ohio EMT-Basic Certification Corequisite(s): none

Lab Fee: \$65

Student Liability Insurance: \$62

#### (ENG) English

ENG 111 English I (4)

The process of writing personal and argumentative essays; language issues; and library skills. Writing intensive. Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or CPE 071 or appropriate Compass score

#### ENG 112 English II (4)

Critical thinking, persuasive writing, research skills, and literary analysis. Writing intensive.

Prerequisite(s): ENG 111

ENG 130 Introduction to Literature (3)

Critical readings, discussion, and analysis of poetry, short story, and drama.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or 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 Communications (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 OAD 105

#### 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 systems of another culture in terms of how these variables influence on-job communication preferences and expectations. Prerequisite(s): ENG 111 and ITS 12W 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 and 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 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): DEV 091, 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): DEV 061 or CPE 061

Corequisite(s): DEV 102 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): DEV 061 or CPE 061

Corequisite(s): DEV 102 or higher math placement

Lab Fee: \$10

#### ENT 112 Metal Fabrication (4)

Metal Fabrication with emphasis on angle, bar, plate and 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 205 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, DEV 061 or instructor permission 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.

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 or MET 211, ENT 121,

**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 instructor permission

Corequisite(s): INT 251

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): DEV 061 or CPE 061 and DEV 071 or 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): DEV 061 or CPE 061 and DEV 071 or 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): DEV 061 or CPE 061 and DEV 071 or 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, writing. German culture. Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

#### (GLG) Geology

GLG 110 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.

Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass

Lab Fee: \$40

#### GLG 111 Geology I (4)

Study of the materials of which the world is composed; examination of ongoing surface processes, such as the movement of water and ice, 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): DEV 061 or CPE 061 or appropriate Compass

Lab Fee: \$40

#### GLG 112 Geology II (4)

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): DEV 061 or CPE 061 or appropriate Compass

score

Lab Fee: \$40

#### GLG 113 Geology III (4)

The interaction of geologic processes with the purposes posed by humans. Includes use and misuse of resources. hazardous environments, engineering difficulties, waste, and effects on health.

Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass score

Lab Fee: \$40

#### 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: \$20

#### GLG 201 Geology and Biology of the Bahamas (5)

Course is taught at the Bahamian Field Station on San Salvador, the outer most island in the Bahamas; with Karst topography, Foraminfera identification, Calcareous algae, stromatolites, fossil identification, and current day ocean shore environments. Students will experience Bahamian cultural events, both past and present.

Prerequisite(s): BIO 111, GLG 110 or GLG 111 or with

special permission from instructor.

#### (GPH) Graphics)

GPH 100 Introduction to Graphic Design (4)

Introduction to the Macintosh (Mac) as a layout tool. Introduction to QuarkXpress, Adobe Illustrator, Adobe Photoshop. Survey of graphic design as a profession.

Prerequisite(s): DEV 061 or CPE 061

Lab Fee: \$20

#### GPH 105 Design Fundamentals (3)

Study of five design principles: line, shape, value, texture, and color. 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): DEV 061 or 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

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

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 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

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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: Quark XPress 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 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): ITS 103 OR GPH 100

Lab Fee: \$20

GPH 231 Intermediate Web Design (3)

Study of web page design. Intermediate use of Macromedia Dreamweaver with emphasis on aesthetics of web page design.

Prerequisite(s): GPH 230

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, Adobe Illustrator.

Prerequisite(s): GPH 211 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 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 (4)

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; and creation and evolution.

Prerequisite(s): A minimum GPA of 3.0 and ENG 111

Corequisite(s): ENG 112

HON 292 Literature, Gender & Humanism (3)

Critical reading, analysis, and discussion of short stories, poems, drama and novels. Each offering focuses on a variety of relationships presented in the literature. Goal is to understand what a work of literature means and the art of conveying its meaning to the reader.

Prerequisite(s): ENG 111 & ENG 112

#### (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): DEV 061 or 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): DEV 061 or CPE 061 and DEV 071 or 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 Centuries. Nationalism, Revolution, the New Industrialism, Socialism, Colonialism, Imperialism, and 20th-Century developments.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or CPE 071 or appropriate Compass score

Corequisite(s): ENG 111

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): DEV 061 or 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): DEV 061 or CPE 061 and DEV 071 or 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 Centuries. Political, social, cultural, and economic history, concluding with a review of current events.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or 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 human nature: using readings, writing, and critical thinking skills to address and evaluate readings from at least two disciplines including the natural sciences, sociology, psychology, mathematics, literature, history, theatre, religion, and philosophy; course content will vary.

 $\label{eq:continuous} Prerequisite(s): A minimum of 60 credit hours earned including ENG~112$ 

#### (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): DEV 061 or CPE 061 or instructor permission Lab Fee: \$10

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): DEV 061 or 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.

 $\label{eq:continuous} Prerequisite(s): DEV\,061 \ or \ CPE\,061 \ or \ instructor \ permission \\ Lab \ Fee: \ \$10$ 

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, CPE 061 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): DEV 061 or 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: \$20

#### 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 or DEV 061

Lab Fee: \$40

#### INT 140 Industrial Safety (2)

An introduction to industrial regulatory safety terminology and requirements.

Prerequisite(s): DEV 061 or 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): DEV 061 or CPE 061 or instructor permission Components and operation of common alternating and

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, DEV 061

Lab Fee: \$56

#### 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/tagout, emergency stop pushbuttons, and safety disconnect switches.

Prerequisite(s): CPE 061, DEV 061

Lab Fee: \$56

#### 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): DEV 061 or 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 6axis operations.

Prerequisite(s): ENT 121

Lab Fee: \$36

#### 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/tagout 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/tagout, 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 251 Programmable Logic Controllers (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

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 250 or INT 251

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 systemlevels. 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

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

Lab Fee: \$16

#### 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, vbelts, spur gears, bearings, and couplings. Lockout/tagout, 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

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#### (ITS) Information Techonlogy Systems

ITS 080 Computer Fundamentals (1)

Fundamental concepts of computers, operating systems, and network usage. Experience with basic word processing, spreadsheet, database, and graphic programs. Preparatory course for students with little or no computer background. Graded on an S or U (satisfactory or unsatisfactory) basis.

Prerequisite(s): DEV 061 or CPE 061

Corequisite(s): none

#### ITS 102 Keyboarding/Word Processing (3)

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): DEV 061 or 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 2002) 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)

Knowledge and skills necessary to develop web applications. Utilization of HTML. Development of dynamic web sites. Creation of interactive web pages.

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): Equivalent ITS 080 Skills, keyboarding skills; CPE 061

Lab Fee: \$15

#### ITS 110 Database Management Systems (6)

Step-by-step approach to learning Structured Query Language (SQL). Topics include: data definition, table maintenance, queries, reports, and database administration. Relational database design theory.

Prerequisite(s): Computer knowledge level equivalent to

# Lab Fee: \$20 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 • and basic DOS commands 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 2002). 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 12P Beginning Presentation Graphics (1)

Techniques of visual presentation development via the use of a presentation software package (PowerPoint 2002). 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 2002). 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 2002). 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 102, 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 14A Intermediate Windows Concepts (2)

This course builds on the Windows Concepts course by using Internet communication tools, sharing information over a network and between programs, working with images and sound, managing hardware, backing up files, and using computer administration tools. (Windows XP)

Prerequisite(s): ITS 12A

#### ITS 14D Intermediate Database (2)

Intermediate database manipulation techniques using packaged software (Access 2002). Arithmetical/statistical manipulations, labels, reports, indexing, searching, programming, etc. Prerequisite(s): ITS 12D or instructor permission

#### ITS 14P Intermediate Presentation Graphics (2)

Techniques for adding visual and audio elements to intermediate and expert level presentations. Customizing presentations. Delivery of presentations. (PowerPoint 2002) Prerequisite(s): ITS 12P or Instructor Permission

#### ITS 14S Intermediate Spreadsheet (2)

Intermediate spreadsheet manipulation techniques using packaged software (Excel 2002). 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 2002)

Prerequisite(s): ITS 12W, ITS 102, or ITS 103

#### ITS 200 Project Management (5)

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. Use of Microsoft Project software. Cover CompTIA's Project+ and Microsoft Office Specialist (MOS) Project certification objectives.

Prerequisite(s): Computer knowledge level equivalent to ITS 080; CPE 061

#### (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.

Prerequisite(s): BIO 102, BIO 105, ENG 111, ITS 12W, PSY 111, PSY 221

Corequisite(s): LPN 125, LPN 160, LPN 130, NUR 114

LPN 125 Introduction to Disease Processes (4)

Basic principles of microbiology, signs and symptoms of common disease/conditions of each body system, diagnostic tests, and treatment and principles of nursing care.

Prerequisite(s): BIO 102, BIO 105, ENG 111, ITS 12W, PSY 111, PSY 221

Corequisite(s): LPN 108, LPN 160, LPN 130, NUR 114

#### LPN 130 Nursing Trends I (2)

Ethical and legal dimensions of practical nursing practice. Historical perspectives on practical nurses and nursing organizations.

Prerequisite(s): BIO 102, BIO 105, ENG 111, ITS 12W, PSY 111, PSY 221

Corequisite(s): LPN 108, LPN 125, LPN 160, NUR 114

#### LPN 133 Nursing Trends II (2)

Identifies career concerns and opportunities for practical nurses.

Prerequisite(s): LPN 130, LPN 145, LPN 150, LPN 170, LPN 181

Corequisite(s): LPN 191, LPN 195

#### 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.

Prerequisite(s): LPN 108, LPN 125, LPN 160, NUR 114 Corequisite(s): LPN 150, LPN 170, LPN 181

#### LPN 150 Pediatric Nursing (3)

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.

Prerequisite(s): LPN 108, LPN 125, LPN 130, LPN 160 Corequisite(s): LPN 146, LPN 170, LPN 181

#### 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.

Prerequisite(s): BIO 102, BIO 105, PSY 111 PSY 221, ENG 111, ITS 12W, MST 181 or equivalent

Corequisite(s): LPN 108, LPN 125, NUR 114, LPN 130

Lab Fee: \$122

Student Liability Insurance: \$20

LPN 170 Fundamentals of Nursing II (7)

Role of the practical nurse in the maintenance and promotion of health; application of medical and surgical asepsis 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.

Prerequisite(s): LPN 125, LPN 130, LPN 160, NUR 114,

LPN 108

Corequisite(s): LPN 146, LPN 150, LPN 181

Lab Fee: \$125

#### LPN 181 Women's Health and Obstetric Nursing (2)

A holistic approach to women's health care and its relationship to the childbearing female will be presented. Female anatomy and physiology, the male reproductive system, and fetal growth and development will be discussed. The normal changes of pregnancy, labor and delivery, postpartum, and the newborn will be taught with an emphasis on preventing complications. It includes helping a woman through the different stages of maternity care during a time of physical and emotional changes, and providing support for the newborn, family, and significant other. Current trends in women's health will also be discussed.

Prerequisite(s): LPN 125, LPN 130, LPN 160, NUR 114, LPN 108

Corequisite(s): LPN 146, LPN 150, LPN 170

#### LPN 191 Medical-Surgical Nursing I (10)

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.

Prerequisite(s): LPN 146, LPN, 150, LPN 181, LPN 170

Corequisite(s): LPN 195, LPN 133

Lab Fee: \$65

#### LPN 195 Medical-Surgical Nursing II (4)

Comprehensive review and testing of all prior nursing classes. Application of the nursing process in a long-term care preceptorship to provide and manage the nursing care of groups of clients requiring skilled nursing care.

Prerequisite(s): LPN 146, LPN 150, LPN 170, LPN 181,

Corequisite(s): LPN 133, LPN 191

Lab Fee: \$65

#### (LSC) Logistics

#### 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

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#### 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 1

(MGT) Management Prerequisite(s): MGT 112

MGT 105 Introduction to Business (3)

A broad survey of the American business system encompassing 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): DEV 061 or CPE 061

Corequisite(s): NONE

MGT 106 Human Relations and 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): DEV 061 or CPE 061

#### MGT 112 Principles of Business 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): DEV 061 or CPE 061

MGT 202 Customer and Quality Management (4)

Customer satisfaction and quality management through employee involvement. Continuous process improvement, supplier partnerships, performance measures, Statistical Process Control (SPC), ISO9000, benchmarking, and the use of various management tools used for managing quality. Prerequisite(s): MGT 105 or MGT 106 or MGT 112

#### MGT 214 Small Business Theory and Practice (4)

Small business and entrepreneurship. Decision for selfemployment 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 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 105, MGT 106, MGT 112

#### 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 Business Law (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): CPE 061 or DEV 061

#### 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): Business experience or minimum of 6 credit hours of MGT courses

#### MGT 266 Quantitative Business Methods (4)

Application of practical business mathematics and statistical processes to analyze business situations.

Prerequisite(s): MTH 106

#### 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 decisionmaking 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

Corequisite(s): MGT 270

#### (MKT) Marketing

MKT 200 Principles of Marketing (4)

Marketing of products and services. Product development, channels of distribution, pricing structures, promotional aspects, electronic marketing.

Prerequisite(s): CPE 061 or DEV 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): ITS 103 or GPH 100

Lab Fee: \$10

#### 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 Corequisite(s): MKT 255

#### 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): DEV 061 or CPE 061 or appropriate Compass

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): DEV 061 or CPE 061 or appropriate Compass

Corequisite(s): MLT 101

Lab Fee: \$48

#### 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): DEV 061 and DEV 101 or CPE 061 and CPE

101 or appropriate Compass score 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): DEV 061 or 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

Prerequisite(s): DEV 061 or CPE 061 or appropriate Compass

Corequisite(s): MLT 116

Lab Fee: \$30

#### MLT 123 Medical Microbiology I (3)

Identification of bacteria by microscope, media, inoculation, biochemical activities and sensitivity testing. Basic disease

Prerequisite(s): MLT 101, MLT 102, DEV 061 or CPE 061

or appropriate Compass score 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, DEV 061 or CPE 061

or appropriate Compass score Corequisite(s): MLT 123

Lab Fee: \$100

#### 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, DEV 061 or CPE 061

or appropriate Compass score

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, DEV 061 or CPE 061

or appropriate Compass score 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 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 Corequisite(s): MLT 131

Lab Fee: \$100

Lab Fee: \$100

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, DEV 061 or CPE 061

or appropriate Compass score 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, DEV 061 or CPE 061

or appropriate Compass score Corequisite(s): MLT 135

Lab Fee: \$80

#### MLT 181 Directed Practice I (4)

Clinical site assignment; departmental rotation application of principles and techniques under supervision of clinical staff and college faculty.

Prerequisite(s): MLT 136, MLT 132, MLT 124, MLT 126,

MLT 117

Corequisite(s): MLT 191 Certification Fee: \$25

#### MLT 191 Seminar I (3)

Weekly review of problems and progress in Directed Practice I. Guest speakers; current topics; quality control. Student presentation of case study.

Prerequisite(s): MLT 135, MLT 131, MLT 123, MLT 125,

MLT 116

Corequisite(s): MLT 181 Certification Fee: \$25

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

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

Corequisite(s): MLT 211

Lab Fee: \$100

#### 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, BIO105, ITS 103, MLT 123, MLT

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

Corequisite(s): MLT 213

Lab Fee: \$100

#### MLT 223 Hematology II (3)

Disorders of blood cells and platelets including biochemistry of the red blood cell, anemias, leukemias. Principles and procedures of coagulation.

Prerequisite(s): ENG 111, BIO 105, ITS 103, MLT 125, MLT

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

Corequisite(s): MLT 223

Lab Fee: \$65

#### 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

Corequisite(s): MLT 227

#### MLT 227 Immunohematology Laboratory (4)

Typing techniques, principles, procedures; cross-match and panel screening; atypical antibody identification and quality control.

Prerequisite(s): MLT 211, MLT 212

Corequisite(s): MLT 226

Lab Fee: \$140

#### 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

#### MLT 281 Directed Practice II (4)

Clinical site assignment; departmental rotation; application of principles and techniques under supervision of clinical staff and college faculty.

Prerequisite(s): All prior coursework leading to a degree in

Medical Laboratory Technology Corequisite(s): MLT 291

#### MLT 291 Seminar II (3)

Weekly review of problems and progress in Directed Practice II. Guest speakers; current topics; quality control; and student presentation of research project.

Prerequisite(s): All prior coursework leading to a degree in

Medical Laboratory Technology

Corequisite(s): MLT 281 Certification Fee: \$75

#### (MST)Multi-Skilled Healthcare

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): DEV 061 or CPE 061 or appropriate Compass

score

Lab Fee: \$20

Student Liability Insurance: \$20

#### (MTH) Mathematics

MTH 101 Technical Mathematics Applications A (2)

Applications course for Engineering Technology students. Instruction in the use of scientific calculators, and other technology. Topics include: area and volume, scientific notation and significant figures, metric/English conversions, geometry applications, graphing applications, and vector forces. Prerequisite(s): CPE101 or DEV 101 or placement test score, CPE 061

Corequisite(s): CPE 102 or DEV 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 DEV 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): DEV 101 or CPE 101

#### MTH 107 Technical Mathematics Applications B (2)

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, graphing applications. Applications of linear and quadratic functions, and use of conic sections. Prerequisite(s): CPE 103 or DEV 103, MTH 101, CPE 061 Corequisite(s): MTH 120 or MTH 121

Lab Fee: \$10

#### MTH 108 Technical Mathematics Applications C (2)

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 061

Corequisite(s): MTH 140

Lab Fee: \$10

#### MTH 110 Quantitative Reasoning (4)

Discovery of fundamental concepts and skills of quantitative reasoning achieved by exploring real world data from various disciplines. Data collection, organization, display, interpretation, analysis and evaluation. Rates of change and percentages. Basic probability and statistics, simulation, sampling, and expected value. Use of a spreadsheet program and/or a graphing calculator.

Prerequisite(s): CPE 061, CPE 103 or appropriate Compass score

#### MTH 120 College Algebra IA (5)

Algebraic expressions; equations and inequalities; linear, polynomial, and transcendental functions and their graphs; systems of equations and inequalities, analytic geometry. 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; equations and inequalities; linear, polynomial, and transcendental functions and their graphs; systems of equations and inequalities, analytic geometry. 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 complex numbers, synthetic division, remainder theorem, factor theorem, matrices and determinants, Gauss-Jordan, Cramer's Rule, sequences and series, permutations, combinations, probability, and variation. 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

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, continuity, differentiation of polynomial and trigonometric functions, applications of the derivative. Prerequisite(s): MTH 122 and MTH 140 or an appropriate Compass score

#### MTH 222 Calculus II (5)

Differentiation of logarith definite and indefinite integrals of polynomia exponential functions, trig of integration.

Prerequisite(s): MTH 221 Differentiation of logarithmic and exponential functions, definite and indefinite integrals, Riemann sums, applications of the integrals of polynomial functions, logarithmic functions, exponential functions, trigonometric functions, techniques

MTH 223 Calculus III (5)
Improper integrals, L'Hopital's Rule, Taylor's formula, power series, Taylor series, Maclaurin series, binomial series, polar curves, polar coordinates, vectors, rotation of axes, conic sections.

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 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 (2)

Group instruction focusing on the fundamentals of piano performance skills. Prerequisite(s): none

Lab Fee: \$50

Corequisite(s): none

#### MUS 150 Clark State Chorale (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. Prerequisite(s): none Corequisite(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.

Prerequisite(s): none Corequisite(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 (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 Corequisite(s): none Lab Fee: \$100

#### MUS 293 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 Corequisite(s): none

Lab Fee: \$50

#### MUS 295 Applied Music (1)

Private music instruction focusing on the fundamentals of individual performance skills.

Prerequisite(s): None

Lab Fee: \$50

#### (NTK) Network Administraton

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 two-course sequence that covers A+ and Server+ certification objectives.

Prerequisite(s): DEV 061 or CPE 061

Lab Fee: \$50

#### NTK 178 PC/Network Essentials II (6)

Intensive introduction to multi-tasking 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 two-course sequence that covers the A+ and Server+ certification objectives.

Prerequisite(s): CPE 091; NTK 176

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 PC /Network Essentials II, 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): 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): NTK 202 or instructor permission

Lab Fee: \$50

#### NTK 221 Information Security I (5)

Overview of computer/information security concepts. Assessment, development, and implementation of security policies. Review of information/network security tools and

Prerequisite(s): Instructor permission

Lab Fee: \$50

#### NTK 222 Information Security II (5)

Advanced discussion of information security topics, including TCP/IP routing protocols, internetworking technologies, cryptology, firewalls, VPNs, encryption, and others. Handson use/review of computer security software.

Prerequisite(s): NTK 221

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 176 PC/Network Essentials I, or instructor permission.

Lab Fee: \$50

#### NTK 240 Unix/Linux Administration 1 (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 172 or NTK 176

Lab Fee: \$50

#### NTK 250 Novell NetWare Administration (5)

Hands-on experience with Novell Netware operating system. Fundamental network management tasks, setting up user accounts, managing the network file system, creating login scripts, managing NDS security, setting up and managing print services. This course covers Certified Novell Administrator (CNA) certification requirements.

Prerequisite(s): CPE 101; NTK 172 or NTK 176 or instructor permission

Lab Fee: \$50

NTK 251 Advanced Novell NetWare Administration (5)

Knowledge and skills needed to configure, design, and administer a complex NetWare network. Advanced Novell NetWare skills. Build a TCP/IP network. Build an Internet infrastructure. Manage and optimize Netware and backup Covers restore. Certified NetWare and Engineer(CNE)certification requirements.

Prerequisite(s): NTK 250

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): NTK 178

Lab Fee: \$50

#### NTK 256 Oracle Administration 1 (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): NTK 176 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 274 Administering Microsoft Network Infrastructure (5)

Installing, managing, monitoring, configuring, and troubleshooting DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a network infrastructure. Course covers Microsoft certification objectives.

Prerequisite(s): NTK 270 or instructor permission

Lab Fee: \$50

NTK 276 Administering Microsoft Directory Services (5)

Installing, configuring, and troubleshooting the components of Active Directory. Backing up and restoring Active Directory. Course covers Microsoft certification objectives.

Prerequisite(s): NTK 270 or instructor permission

Corequisite(s): NTK 272 (may be taken as a prerequisite)

Lab Fee: \$50

## NTK 277 Designing Microsoft Directory Services Infrastructure

Analysis of business requirements and the design of a directory service architecture using Active Directory. Connectivity between and within systems and data replication. Course covers Microsoft certification requirements. Prerequisite(s): NTK 270 or instructor permission

Corequisite(s): NTK 272 (may be taken as a prerequisite)

Lab Fee: \$50

#### NTK 278 Designing Microsoft Security (5)

Analysis of business requirements for security and designing a security solution that meets business requirements. Controlling access to resources, auditing, authentication, and encryption. Course covers Microsoft certification objectives.

Prerequisite(s): NTK 270 or instructor permission

Lab Fee: \$50

#### NTK 279 Managing a Microsoft Network Environment (5)

Configuring, managing, securing, and troubleshooting web resources, network infrastructure, remote access, Active Directory, client and server computers. Covers Microsoft certification objectives.

Prerequisite(s): DEV 061 or CPE 061

Corequisite(s): NTK 270 (may be taken as a prerequisite)

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

#### (NUR) Nursing

NUR 114 Dosage Calculations I (1)

Systems of measurement and calculation of drug dosage. Prerequisite(s): CPE 091, CPE101 or appropriate Compass scores

#### 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 in college and hospital laboratory settings.

Prerequisite(s): MST 181 within past two years or equivalent Corequisite(s): BIO 102, BIO 121, ITS 103, NUR 114

Lab Fee: \$69

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. College and hospital laboratory settings.

Prerequisite(s): BIO 102, BIO 121, ITS 103, NUR 114, NUR

170

Corequisite(s): BIO 122

Lab Fee: \$70

# 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. College and laboratory settings.

Prerequisite(s): BIO 122, NUR 171

Corequisite(s): BIO 123

Lab Fee: \$75

# NUR 175 Transition to Registered Nursing (4)

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. Classroom and college laboratory experiences.

Prerequisite(s): BIO 122, ITS 103, NUR 114, Current licensure

as a practical nurse Corequisite(s): BIO 123

Lab Fee: \$43

Student Liability Insurance: \$20

#### 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.

Prerequisite(s): NUR 274, NUR 275, NUR 276

Corequisite(s): NUR 268, NUR 269

# 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.

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.

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. Prerequisite(s): BIO 123, BIO 131, NUR 172 or NUR 173 or NUR 175, PSY 221

Corequisite(s): NUR 275

Lab Fee: \$20

# 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.

Prerequisite(s): BIO 123, BIO 131, NUR 172 or NUR 173 or

NUR 175, PSY 230 Corequisite(s): NUR 274

Lab Fee: \$20

Student Liability Insurance: \$20

# NUR 276 Nursing VI (11)

Expands on concepts presented in Level I (NUR 170, 171, 172 or NUR 173). 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. Prerequisite(s): BIO 123, BIO 131, NUR 172 or NUR 173 or

Lab Fee: \$60

NUR 175, PSY 221

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.

Prerequisite(s): NUR 267, NUR 268, NUR 269

Lab Fee: \$45

# (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, and administrative, 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): DEV 061 or CPE 061

OAD 130 Advanced Grammar & Proofreading (4)

Mastery of grammar and punctuation concepts and proofreading

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 well as records control, retrieval, and Prerequisite(s): DEV 061 or CPE 061 alphabetic, geographic, numeric, and subject methods as well as records control, retrieval, and management.

OAD 200 Administrative Office Management (3)

Basic concepts of office management, organization structure, and design; systems analysis; motivating, supervising, and communicating with office employees.

Prerequisite(s): DEV 061 or 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

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 a medical management software package on a microcomputer.

Prerequisite(s): OAD 103, OAD 135, OAD 140, OAD 248,

BIO 102

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, decisionmaking, organizing and planning work, meeting deadlines, and other related administrative abilities.

Prerequisite(s): ENG 221, ITS 12D, ITS 12S, ITS 101, 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. Laboratory experience with emphasis on application of related skills with accuracy and completeness.

Prerequisite(s): BIO 102, 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. Laboratory experience emphasizing application of related skills with accuracy and completeness. Other coding systems discussed.

Prerequisite(s): BIO 102, BIO 105

OAD 285 Co-op Education/Internship (2)

Relating academic studies to the world of work, 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, OAD 246 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 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 (0)

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): DEV 061 or CPE 061

Lab Fee: \$12

### (PGR) Personal Growth

#### 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. A reading, writing, and study skills course designed to lessen the anxiety of new or returning college students.

Prerequisite(s): None

Lab Fee: \$8

# 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): DEV 061 or CPE 061 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.

Prerequisite(s): None

Lab Fee: \$8

# 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

#### 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 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): ENG 111 required, ENG 112 recommended

Corequisite(s): ENG 112

# (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): DEV 071 or CPE 071 or appropriate COMPASS

score

Corequisite(s): ENG 111

# PHL 200 Critical Thinking (3)

Methods for determining good reasoning. Topics will include the elements of critical thinking; the nature of knowledge, belief, and truth; science vs. pseudoscience; informal fallacies; and Venn diagrams. The student learns to identify, analyze, and evaluate basic inductive and deductive arguments.

Prerequisite(s): DEV 071 or 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.

 $Prerequisite (s): DEV\,071\,OR\,CPE\,071\,or\,appropriate\,Compass$ 

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 or DEV 061

Lab Fee: \$25

#### 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

#### 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: \$25

#### 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: \$25

### 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

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.

Lab Fee: \$25

#### PHO 131 Digital Photography II

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.

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): DEV 101 or CPE 101 and DEV 071 or 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): DEV or 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): DEV or 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): DEV or 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): DEV or 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 or 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

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) Polical 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): DEV 061 or CPE 061 or appropriate Compass

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): DEV 061 or CPE 061 and DEV 071 or 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): DEV 061 or CPE 061 and DEV 071 or CPE

071 or appropriate Compass score

**o** 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 peacekeeping 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): DEV 061 or 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): DEV 071 or 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 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

#### (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): DEV 061 or CPE 061 and DEV 071 or 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; professional behavior.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or CPE

071 or appropriate Compass score

Corequisite(s): PTA 110, BIO 118, BIO 121 and ENG 111

#### PTA 145 PTA Procedures I (4)

Continuation of goniometry and manual muscle testing for all joints. Introduction to the rapeutic exercise. Documentation. Professional behavior development.

Prerequisite(s): BIO 102, BIO 118, BIO 121, PTA 110, PTA

120

Corequisite(s): BIO 122, BIO 230, PSY 111

Lab Fee: \$10

# PTA 146 PTA Procedures II (5)

Application of heat and cold, massage and traction. Pathologies and PT intervention for cardiopulmonary, lymphatic, immune, endocrine/metabolic integumentary, gastrointestinal, genitourinary and respiratory disorders. 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 and rehabilitation for orthopedic and musculoskeletal disorders; positioning, transfers and gait training. 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)

Sterile techniques and wound care. E-stim, hydrotherapy, diathermy, and ultrasound. TENS, MENS, phonophoresis, and iontophoresis. Theories of pain. Assessment of skin integrity and sensation. Continuation of documentation. Professional behavior development.

Prerequisite(s): PTA 146, PTA 160

Lab Fee: \$30

Certification Fee: \$40

#### PTA 260 PTA Rehabilitation II (6)

Normal motor development. Motor control. Pediatric impairments and rehabilitation. Introduction to adult neurological impairments and rehabilitation. Continuation of professional development.

Prerequisite(s): PTA 146, PTA 160, PTA 241, PSY 221, PSY

222

Corequisite(s): PTA 281, PTA 291

Lab Fee: \$10

Certification Fee: \$40

# PTA 265 PTA Rehabilitation III (6)

Adult orthopedic and neurological impairments requiring advanced treatment concepts. Prosthetics, orthotics, adaptive seating. Chronic pain. Environmental assessment. Continuation of professional development.

Prerequisite(s): PTA 260

Corequisite(s): PTA 282, PTA 292

Lab Fee: \$10

Certification Fee: \$40

#### PTA 270 PTA Trends and Issues (2)

Current trends in practice. Health care financing. Interpersonal communications. Contracts. Supervisory/management skills. Ethical issues. Continuation of professional development.

Prerequisite(s): PTA 110 Certification Fee: \$40

### PTA 281 Directed Practice I (3)

Application of knowledge and skills for physical therapist assistants at a beginning level; supervised experiences in selected agencies. Students will be assessed in skills using the Clinical Performance Instrument, by Clark State faculty observation of clinical performance, and through discussion with the clinical faculty.

Prerequisite(s): PTA 241

Corequisite(s): PTA 260, PTA 291 Student Liability Insurance: \$20

Certification Fee: \$40

### PTA 282 Directed Practice II (3)

Application of knowledge and skills for the physical therapist assistant at a developing to progressively developing level as appropriate to previous and current clinical experience; supervised experiences in selected agencies. Students will be assessed in skills using the Clinical Performance Instrument, by Clark State faculty observation of clinical performance, and through discussion with the clinical faculty.

Prerequisite(s): PTA 260, PTA 281, PTA 291

Corequisite(s): PTA 265, PTA 292

Certification Fee: \$40

### PTA 283 Directed Practice III (6)

Application of knowledge and skills for the physical therapist assistant at entry level as appropriate for student's previous and current clinical experiences; supervised experiences in selected agencies. Students will be assessed in skills using the Clinical Performance Instrument, by Clark State Faculty observation of clinical performance, and through discussion with the clinical faculty.

Prerequisite(s): PTA 282, PTA 292,

Corequisite(s): PTA 293 Certification Fee: \$40

#### 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; select topics.

Prerequisite(s): None Corequisite(s): PTA 281 Certification Fee: \$40

#### 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: \$40

#### 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 Certification Fee: \$40

### (RCC) Realtime Closed Captioning

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 DEV 061

# RCC 211 Captioning/CART I (3)

Introduction to realtime captioning/CART skills, which include using capuoning some dictionaries, and finger spelling. Prerequisite(s): RTR 108 (formed better grade and RTR 106.

Lab Fee: \$15

RCC 212 Captioning/CART II (3)

Continued development of realting development of realting development. include using captioning software, building and managing dictionaries, and finger spelling.

Prerequisite(s): RTR 108 (formerly RTR 102) with a C or

Continued development of realtime captioning/CART skills, which include using captioning software, building and managing dictionaries, and finger spelling.

Prerequisite(s): RCC 211 and RTR 201 at 140 wpm with 96 percent accuracy

Lab Fee: \$15

# RCC 213 Captioning/CART III (3)

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 and RTR 202 at 150 wpm with 96 percent accuracy

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, prescripting, the CART Provider's Manual, Guidelines for Professional Practice, and the Americans with Disabilities ACT (ADA).

Prerequisite(s): CPE 101 or DEV 101, RCC 211, RTR 201

# RCC 280 Captioning: The Professional Experience (0)

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 at 160 wpm

with 96 percent accuracy

RCC 281 CART: The Professional Experience (0)

CART practice with a minimum of 40 hours in the classroom

or other approved activity.

Prerequisite(s): RCC 212, RCC 245, RTR 202 at 160 wpm

with 96 percent accuracy

# (RES) Real Estate

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): DEV 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): DEV 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): DEV 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): DEV 061

# (RJR) Realtime Judicial Reporting

RJR 211 Advanced Testimony I (3)

Development of skill in writing two- and multi-voice dictation. The 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)

Development of writing skills in two- and multi-voice dictation. The 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)

Development of skill in writing two- and multi-voice dictation at the terminal speed of 225 wpm.

Prerequisite(s): RJR 212

Corequisite(s): RTR 151, RTR 152, or RTR 153

RJR 231 Jury Charge I (3)

Introduction to jury charge dictation and terminology. The course encompasses speeds ranging from 100-160 wpm.

Prerequisite(s): RTR 102 or RTR 108

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

RJR 232 Jury Charge II (3)

Application of judicial terminology with development of writing skill in jury charge dictation. The 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)

Application of judicial terminology with development of writing skill in jury charge dictation at the terminal speed of 200 wpm.

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 or DEV 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.

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. Intensive practice dictation with emphasis on rapid and accurate reading of notes. Minimum speed of 60 wpm on dictation of familiar material with rapid readback.

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 readback 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, readback 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 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, readback 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 80-140 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)

Continue development of skill in writing question-and-answer dictation with emphasis on speed ranging from 100-160 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)

Continued development of skill in writing question-andanswer 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)

The judicial system and the legislative process with emphasis on legal and Latin 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 and library sources. Prefixes, suffixes, and troublesome word endings as well as spelling rules.

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 100 or CRE 100 or RTR 105

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 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 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

Lab Fee: \$15

RTR 152 Realtime Transcription (2)

Supervised transcription of two speed dictation tests per week taken in two concurrent speed course. The transcription must be completed within 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

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. The transcription must be completed with 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

Lab Fee: \$15

#### RTR 201 Advanced Speed Building I (3)

Development of writing skill in literary dictation. The course encompasses speeds ranging from 100-150 (Judicial) and 120-160 (Captioning/CART).

Prerequisite(s): RTR 102 or RTR 108

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

#### RTR 202 Advanced Speed Building II (3)

Continued development of writing skill in literary dictation. The course encompasses speeds ranging from 120-160 wpm (Judicial) and 140-180 wpm (Captioning/CART).

Prerequisite(s): RTR 201

Corequisite(s): RTR 151, RTR 152, or RTR 153

Lab Fee: \$15

#### RTR 203 Advanced Speed Building III (3)

Development of writing skill in literary dictation at the terminal speed of 180 wpm at 95 percent accuracy (Judicial) and 200 wpm at 96 percent accuracy (Captioning/CART).

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): DEV 061 or CPE 061 and DEV 071 or 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): DEV 061 or CPE 061 and DEV 071 or 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)

Sociological focus on physical health, mental health, drugs and alcohol, crime and criminals, violence, changing family, and aging in America.

Prerequisite(s): SOC 110 highly recommended and ENG

111 and SOC 110 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 Corequisite(s): ENG 112

# (SPN) Spanish

# SPN 100 Conversational Spanish (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): DEV 061 or CPE 061

#### SPN 111 Spanish I (4)

Study of the vocabulary and structure of the Spanish language; practice in conversation, reading, and writing.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or 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

#### 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 probability, random variables, probability distributions and tests of hypotheses; with a laboratory exploration of probabilistic and statistical concepts, production of computer-generated data presentations, and compilation of routine statistical computations.

Prerequisite(s): DEV 101 or 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, statistical inference, 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

# (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): DEV 061 or CPE 061 or appropriate Compass score

# SWK 105 Chemical Dependency I (4)

Physiological, psychological and socio-cultural effects of addiction to harmful substances. Identification of addictions and referral process.

Prerequisite(s): DEV 061 or 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, ITS 103, or instructor permission

### 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, ITS 103 or instructor permission

SWK 136 Affective Education (4)

This course is designed for Social Service and Early Childhood Education 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 (4)

Theories of treatment, recovery and prevention of addictions. Treatment skills and modalities.

Prerequisite(s): ENG 111, SWK 105 or permission of instructor

SWK 215 Special Populations in Chemical Dependency (3)

Impact and treatment of chemical dependency on different cultures and populations including minorities, elderly, women, infants and children.

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

SWK 220 Social Services to Individuals with MR/DD (3)

SWK 220 Social Services to Individuals with MR/DD (3) Social work practice serving individuals with mental retardevelopmental disabilities (MR/DD). Etiology, social, and political issues, services in education, training, a skills.

Prerequisite(s): SWK 121 or instructor permission Social work practice serving individuals with mental retardation/ developmental disabilities (MR/DD). Etiology, social, ethical, and political issues, services in education, training, and life

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-requisite for SWK majors: SWK 121. Pre-requisite 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, 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, 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 271 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 272 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 291 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 292 Corequisite(s): SWK 273

# (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): DEV 061 or CPE 061

THE 107 Speech & Voice for Actor (4)

Basic training and practice in the actor's use of voice and speech.

Prerequisite(s): DEV 061 or 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or CPE 061

#### 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): DEV 061 or CPE 061

#### 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): DEV 061 or CPE 061

#### 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): DEV 061 or CPE 061

#### 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): DEV 061 or CPE 061

THE 166 Children's Theatre Production (4)

Survey and practical application of the production process for child audiences. Must be registered with the consent of theatre faculty.

Prerequisite(s): DEV 061 or CPE 061

#### 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or 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): DEV 061 or CPE 061

THE 240 Basics of Theatre Design (4)

Preliminary concepts of stage, lighting, and costume design. Covers history of theatrical presentation and motivation for design concepts.

Prerequisite(s): THE 211, THE 221, THE 270, THE 271

THE 270 Theatre History I (4)

Survey of the history and development of theatrical production from the Ancient Greeks through the Renaissance. Emphasis on play production rather than literature. Representative plays studied.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or CPE

071 or appropriate Compass score

Corequisite(s): ENG 111

THE 271 Theatre History II (4)

Survey of the history and development of theatrical production from the 17th Century through the present. Emphasis on play production rather than literature. Representative plays studied.

Prerequisite(s): DEV 061 or CPE 061 and DEV 071 or 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.

Prerequisite(s): THE 285



Take advantage of Clark State's student services!

From financial aid and scholarship opportunities
to career placement and tutoring services, we
want you to experience all of Clark State.

Clark State Community College GET SMART.

**Admissions Policy** 

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.

# **Enrollment Categories**

# Post-Secondary Enrollment Option Program

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.

# High School or High School Aged Students Not Enrolled in the Post-Secondary Enrollment Option Program

In addition to taking the Placement Test, you will need to meet with an advisor at least quarterly. A limit in the number of credit hours may be imposed. If you are attending high school and Clark State at the same time, you need to submit a letter of permission from your high school principal or guidance counselor at, or before, registering for classes each quarter.

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

# Adults Who Have Never Attended College (Ability to Benefit)

If you are an adult who has never attended a college, you need only 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 course work.

#### Transfer Students

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.

# International Student Admission

Clark State is authorized under federal law to accept non-immigrant (F-1 visa type) students. The Admissions Office can provide you with materials concerning international students.

# 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 Rhodes Hall, Room 210, this office has everything you need. Fill out the Clark State admissions application and submit it to the Admissions Office. An application may also be filled out and submitted from our website, 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 124. Students applying to the Realtime Reporting program must submit a high school transcript upon graduation or GED certificate.

Spring, Summer, and Fall Quarter applicants are notified of their acceptance to the College beginning in January. Winter Quarter applicants are notified of their acceptance beginning in October.

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.

# **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:

- (a) Students in Medical Laboratory Technology, Physical Therapist Assistant Technology, Information Technology Systems, the Associate of Arts, the Associate of Science or Engineering Technologies are excused from mathematics/algebra placement testing if they have received the following mathematics scores in the last five years: 22 ACT or 560 SAT. Students in other majors (except those enrolling in health programs) are excused from this testing if they have 510 SAT.
- (b) Students are excused from placement testing in reading and writing if they have received the following English scores in the last five years: 20 ACT or 500 SAT.
- (c) Students with mathematics scores of 23 ACT or 700 SAT are eligible for mathematics proficiency tests.
- (d) 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 five 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 2 to 2 1/2 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 Success and Welcome Centers in Rhodes Hall or online at www.act.org/compass.

Most often, your placement test results will remain valid for three to five years. Initial placement tests are free of charge. One retest is allowed at a fee of \$5. Testing is available Monday through Thursday, 10 a.m.-7 p.m. and Friday, 8:30 a.m.-4 p.m. For further information call (937) 323-6049 or visit the Clark State website at 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 Services 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 advanced standing in their pathway programs. For more information contact the College Tech Prep Office at Clark State or call (937) 328-3888.

#### Career Technical Center Graduates

High school graduates of the following career technical schools may qualify for advanced standing at Clark State: 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. To apply for these credits, the students must have graduated within the last two years. Additional information about this program is available in the Admissions Office.

# 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 try and 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 have 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. They must fulfill the prerequisites as listed.

All applicants (including those in high school) 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 a 2.0 cumulative grade point average in the required courses in the curriculum.

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 achieve a 2.0 cumulative grade point average in order to be eligible for acceptance into the program.

Applicants who have not achieved 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

Students must complete a request to enter the EMS program. Forms are available in the Admissions Office and online at http://www.clarkstate.edu/petition.html. All incoming paramedic students must also meet the state entrance requirements described in the curriculum pages.

#### Physical Therapist Assistant

- 1. Successfully complete the reading, writing, and math placement tests or equivalency.
- 2. Prerequisites include chemistry and physics. Refer to the PTA program information.
- 3. Students are required to complete 30 hours of observation. Refer to the PTA program information.
- 4. Students need to complete a petition to enter the PTA program and obtain a petitioning packet from the Admissions Office.
- 5. Applicants who petition by the deadline will be notified of their status by July of each year.

# Medical Laboratory Technology

- 1. Successfully complete reading, math, and algebra placement tests, or obtain a grade of "C" or better in the appropriate college preparatory course.
- 2. After the prerequisites have been completed, students must petition for the program in the Health and Human Services Division Office or online at-http://www.clarkstate.edu/petition.html.
- Applicants who petition by the deadline will be given first priority consideration for entry into the MLT courses. Space limitations do not apply to distance students who complete lab sessions at out of area off campus sites.

#### Practical Nursing

 Successfully complete the reading, writing and math placement tests or successfully complete college preparatory courses.

- 2. After the prerequisites have been completed, students must petition for the program in the Admissions Office or online at http://www.clarkstate.edu/petition.html. If all requirements are complete, the student's name will be placed on the waiting list.
- 3. Successfully complete MST 181 or equivalent 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)

- 1. Successfully complete the reading, writing and math placement tests or successfully complete college preparatory courses.
- 2. One unit of high school chemistry or successful completion of CHM 110 with a grade of "C" or better is required within five years of putting your name on the waiting list.
- 3. After the requirements have been completed, students must petition for the program in the Admissions Office on online at http://www.clarkstate.edu/petition.html. If all requirements are complete, the student's name will be placed on the waiting list.
- 4. Successfully complete the MST 181 or equivalent 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 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 the time limit for accepting prior credits has passed. Eligible students are then reinstated on a space-available basis to the quarter for which they are requesting reinstatement.

Students are generally reinstated to the program that they left, i.e., Day RN or Evening RN, although extraordinary circumstances may be considered. Reinstatement is not guaranteed.

Academic Advising

Academic advising is available to Clark State students throughout each academic quarter. We encourage you to use this service. If you are a new student, an advisor in the Welcome Center, Rhodes Hall, Room 210, will assist you in scheduling your first quarter classes after you have completed an application and taken the placement test.

If you have not declared a major, you should contact the Advising or Career Services Office for academic guidance. If you have a declared major, we'll assign you a faculty advisor at placement testing. Faculty advisors are usually from your chosen major and are here to assist you in planning your sequence of classes and scheduling for each quarter.

Prior to registration each quarter, you'll receive information explaining registration procedures. If you need help, please schedule a meeting with your academic advisor in your field of study. You should contact the appropriate division office for the name of your advisor or view our Clark State web page before registration begins.

Completing the registration process is your responsibility. You also need to be aware of College policies and the requirements of your particular major of study.

# **Registration Information**

New students should contact the Admissions Office at 937/328-6028 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 other campus locations before a new quarter begins.

There are five ways to register: fax your schedule request to 937/328-6097, mail your schedule request to the Records and Registration Office, telephone registration by calling 937/328-8060, web registration through Campus Cruiser, and in person at the Records and Registration Office, Rhodes Hall, Room 213, or the Business and Applied Technologies Office, Brinkman Educational Center, Room 201.

### Credit Hour Limit

You may enroll for a maximum of 18 credit hours per quarter during the regular academic year. You must have the approval of your division dean to enroll in more than 18 credit hours.

# **Adding Courses**

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

# **Dropping Courses**

If you want to drop courses, you must complete a Drop/Add card available from faculty advisors, counselors, division offices, the Academic Advising Center or the Records and Registration Office. If you receive financial aid, check with the Financial Aid Office prior to dropping classes.

If you receive veterans' benefits and drop a class or withdraw from all classes, it is your responsibility to notify the Director of Counseling and Academic Support Services, Rhodes Hall, Room 224, 937/328-6024. Courses dropped anytime during the quarter could result in an overpayment dating back to the first day of the quarter.

If you are thinking about dropping all of your courses, you should talk with a counselor prior to taking such action. Grades will be reflected on transcripts as follows:

- A course dropped during the first 14 days of the quarter will not be counted as work attempted nor will any notation of the enrollment appear on the student transcript.
- A course dropped from the 15th day of the quarter through the fifth class day following midterm will appear on the student transcript with an automatic grade of "W".
- A course dropped after the fifth class day following midterm will be recorded as "F" unless satisfactory justification is given to the instructor for the drop. The instructor should sign the drop card as acknowledgment.
- Dropping a five- or six-week course must be initiated by Friday of the third week of the quarter. For a student to drop a five- or six-week class after the third week, he/she must obtain the instructor's authorization to do so.
- During each of the Summer terms, a grade of "W" will be recorded until midterm for any dropped classes.

# Repeating Courses

You may repeat any course at the College one time without having to request permission. If you are enrolled in a space-limited program, you must also abide by the 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 in 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 card available in the Records and Registration Office. You will need to meet placement testing requirements for your new major.

# Cross-Registration Within SOCHE

If you are a regularly enrolled student at Clark State or any other Southwestern Ohio Council for Higher Education (SOCHE) institution, you may register to take a class offered by another SOCHE institution at no additional charge on a space available basis. Information on the conditions established by the consortium is available in the Records and Registration Office.

# 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/Registration office shall make available to students the appeal process for Clark State Community College.

- 1. The student must complete the Transfer Appeal form (located in the Records/Registration Office Rhodes Hall Rm. 213)
  - a. The appeal form is forwarded by the Records/Registration Office to the appropriate academic dean. The appropriate academic dean evaluates or reevaluates the course(s) and returns the decision to the Record/Registration Office.
  - b. 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.
- 3. 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.

ı	Ohio resident	Out-of-state resident
Instructional fee (up to 16 credit hours)	\$62.50	\$125.00
General fee (up to 14 credit hours) Technology fee	\$ 6.00	\$ 6.00
(up to 16 credit hours)	\$ 5.00	\$ 5.00
	\$73.50	\$136.00

Other Fees and Expenses

Offier rees and Expenses	
Application fee (one time only)	\$15
Late payment fee (per quarter)	\$15
Late registration fee (per quarter)	\$25
Transcript fee	\$22
Auxiliary services fee (per quarter)	\$25
Delayed Payment Plan (DPP) service charge	\$15
DPP late payment fee (per installment)	\$15
Proficiency fee per credit hour	\$15
(minimum charge of \$20)	
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	\$ 5
(per credit hour)	

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 Placement.

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

Since access for students to state-of-the-art technology is critical to the learning experience, there is a \$5 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.

# 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 Quarters

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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 Quarter

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 in 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 Parked in fire lane	\$50 \$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 Police section under Student Services.

# Residency

Clark State follows the Ohio Board of Regents Rule 3333-1-10 for determining a student's residency status.

The following persons are classified as residents of the state of Ohio for subsidy and tuition surcharge purposes: 1) Dependent students, at least one of whose parent or legal guardian has been a resident of the state of Ohio for all other legal purposes for 12 consecutive months or more immediately preceding the enrollment of such student in an institution of higher education. 2) Persons who have resided in Ohio for other legal purposes for at least 12 consecutive months preceding their enrollment in an institution of higher education and who are not receiving and have not directly or indirectly received in the preceding 12 consecutive months financial support from persons or entities who are not residents of Ohio for all other legal purposes. 3) A dependent child of a parent or legal guardian or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, selfsustaining employment and established domicile in the state of Ohio for reasons other than gaining the benefit of favorable tuition rates.

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 approved by the Records and Registration Office prior to the first day of classes for the quarter if the reclassification is to be effective.

# **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 web site 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. 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 two 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 official 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, e-mail address, major, degrees and awards received, participation 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.

# **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 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.

# Grade Reports

You can access your grades through Campus Cruiser. Grades will not be released over the phone. 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 dean 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.

# **Probation**

You are considered to be on probation when your cumulative grade point average falls below the chart 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 during your first quarter of probation. (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. If you remain on probation for two or more consecutive quarters, you may take a maximum of nine course credits of work.

### Dismissal

A student is dismissed from the College when his/her cumulative grade point average falls below the probation levels listed above. Dismissal means that you must sit out the quarter following the term in which your GPA slipped 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

You may be re-admitted to Clark State on probation after you have sat out one quarter.

Upon reinstatement, you must meet with the program advisor/division dean 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 2.0 GPA each quarter 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:

1	
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:

	Credit Hours	Grade	Points
Course 1	3	В	9
Course 2	3	C	6
Course 3	4	В	12
Course 4	3	C	6
Total 1	hours: 13	Total poi	nts: 33

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 case 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 stay at the College. There are other symbols that can be issued with which there are no points associated:

S Satisfactory
U Unsatisfactory
I Incomplete
PR Proficiency
CR Credit
NC No Credit

EX Experiential Credit
TR Transfer Credit
W Withdrawal

X Audit

IP In Progress (self-paced courses only)

N No Grade Reported (Records Office use only)

PG Progressing (developmental only)

If you change majors, please check with your new advisor on recalculating your grade point average.

# 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 Development, Early Childhood Education Administration, Emergency Medical, Medical Laboratory, Practical Nursing, Registered Nursing, Physical Therapist Assistant and Social Services.

Students transferring to Clark State are expected to complete at least 30 credit hours of coursework at Clark State for an associate degree or 18 credit hours for a certificate program. The transfer credits may not exceed one half of the required technical courses for the degree 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 certificate programs may also participate in the graduation ceremony.

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 which 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.

It is the student's responsibility to know where he or she stands in terms of completing graduation requirements.

#### 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 more than 46 quarter hours.

# Credit Equivalencies

You may obtain academic credit through experiential credit and examinations for any of the following: College

Board Advanced Placement, College Level Examination Program, Clark State Proficiency Examinations, Military Training and Non-Collegiate Sponsored Instruction, Joint Vocational and Career Center students, Certified Professional Secretary Certificate and Clark State Prior Learning Portfolio. Additional information is available through the Records and Registration Office.

# Transfer Credits to Clark State

You can be granted credit toward a degree at Clark State for work completed at other 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.

Technical and basic courses that were taken in the last five years generally will be accepted. 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 credit hours 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 the Records and Registration Office in consultation with division deans and the Director of Advising and Articulation. 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.

# **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 you four to six weeks after you mail the form.

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 letter showing aid that is being offered. If you are not eligible for aid, we will notify you in writing.

Application for additional aid, such as Federal Work-Study and Federal Supplemental Educational Opportunity Grant funds, 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.

# **Priority Deadlines**

Summer	March 15
Fall	June 15
Winter	October 15
Spring	December 15

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.

We 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.

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

- 3. You are enrolled as a regular student in an eligible program.
- 4. You need to be a U.S. citizen or eligible non-citizen.
- 5. 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 2004-05 the annual value of Pell Grants at Clark State ranged from \$400-\$4,050 for part-time and full-time students, respectively.

# 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 can-

not 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.

A three percent loan origination fee and up to a one percent guarantee fee is deducted from each disbursement to be made to the student for subsidized and unsubsidized loans.

# 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.

# 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 Part-time Student Instructional Grant Program (OIP)

The Ohio Part-time Student Instructional Grant program (OIP) is for those students who are enrolled for less than full-time (fewer than 12 credit hours each quarter). Please contact the Financial Aid Office to inquire as to the eligibility for this program.

#### Foundation Loan

The Foundation Short-Term Loan is an emergency loan program for the payment of tuition, fees and books. This loan cannot exceed \$900 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 \$900 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 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 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	Grade Point 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 135 credit hours if pursuing a degree or 69 credit hours if pursuing a certificate. All hours attempted at Clark State and any transfer credits accepted by Clark State are included in the 135 and 69 credit hour maximums.

# **Credit Hour Probation**

Aid is processed for one quarter only. You must successfully complete 67 percent of attempted hours each quarter until an overall 67 percent completion is reached. If you are more than 36 credit hours short of meeting the minimum 67 percent requirement, you will be suspended from receiving federal financial aid.

# **Grade Point Probation**

You must maintain the minimum quarterly GPA until 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 their second year of their program. Any student who has attempted more than 90

hours and does not have an overall 2.0 GPA will be suspended from financial aid eligibility.

# Financial Aid Suspension

If the probationary status is not removed in the abovespecified 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 nonfederal 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 change their major or are seeking a second degree before reaching the credit hour maximums must contact the Financial Aid Office to determine new eligibility. Only one change of major or 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 \$5.75 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 Financial Aid Office 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 percent of the aid he or she received (20 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. 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.

# Scholarships

Clark State offers the following scholarships. 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 grade-point average 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, and 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 percent 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. Application is made 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.

# **Academic Services**

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.

# The College Library

The Clark State Library, on the ground floor of the Library Resource Center, provides a variety of materials and services to students, faculty, staff and the community. The Library owns more than 35,000 books, 300 periodicals with electronic access to hundreds more and 2,000 pieces of audiovisual material. The media center 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 and over 100 electronic databases.

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 a.m.-9 p.m., Friday, 8 a.m.-5 p.m. and Saturday, 10 a.m.-3 p.m. Summer hours vary. Between academic quarters, hours are Monday through Friday, 8 a.m. - 5 p.m. The Library is closed when the College is closed. Please call 937/328-6022 for more information.

# **Counseling Services**

Experienced counselors offer an array of programs and services to help you achieve personal growth and academic success. Personal counseling, career exploration and special topic groups are available free of charge. The Counseling Office also provides service to veterans. Counseling services are confidential. For more information, please stop by the Counseling Office, Rhodes Hall, Room 224, call 937/328-6084, 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 Rhodes Hall, Room 220, 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 Services Specialist in Rhodes Hall, Room 215H 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 Rhodes Hall, Room 220, offers a full-service area for new and returning students. Tutoring is available on a walk-in basis Monday through Thursday, 8:30 a.m.-7 p.m. and Friday, 8:30 a.m.-5 p.m. 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.

# **Career Services**

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 Career Center can help you meet these challenges. The Career Center 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 Career Center'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 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 once without permission. A review panel will be convened if you want to take the course more than twice. In order to obtain approval, you will need to identify what changes you have made to enable you to successfully complete the course.

# 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.

Prior Learning Portfolio

If you would like to earn credit for your life experiences, you may put together portfolios that are assessed by members of the Clark State faculty. Guidelines for these portfolios are available in the Arts and Sciences Division.

# 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/.

#### 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.



Want to know who's who at Clark State?

Our campus directory will introduce you to the Clark State family of employees.

Clark State Community College GET SMART.

# **Academic Divisions**

#### Arts & Sciences and Criminal Justice Division

- Robert H. Henscheid, Interim Dean, Professor Emeritus, B.S., Idaho State University; M.S., Air Force Institute of Technology
- Susan E. Bayes, Administrative Assistant to the Dean Kimberly C. Lewis, Administrative Support
- Susan Thompson, Customer Service Specialist, Theatre Arts/ SSO
- Nancy E. Mitchell, Chemistry/Biology Lab Assistant, A.S. Clark State Community College; B.A., Wittenberg University
- Jim E. Anderson, Associate Professor, A.A.S., Clark State Community College; B.S., M.S., Wright State University
- Judith A. Anderson, Professor, B.A., Valparaiso University; M.A., Texas A & M University
- David A. Anon, Police Academy Commander, A.A.S., Clark State Community College
- Laurie E. Buchanan, Associate Professor, B.A.; M.A., Ph.D., Bowling Green State University
- Michelle S. Burch, Assistant Professor, A.A., Black Hawk Community College; B.A., M.A., University of Illinois
- Thomas E. Drerup, Assistant Professor, A.A., Sinclair Community College; B.A., Wright State University; M.A., Central Michigan University
- Dee A. Garwood, Instructor, B.A., Graceland University; M.S.W., The Ohio State University
- Mildred V. Hall, Associate Professor, B.S., University of Pittsburgh; ABD, Virginia Polytechnic Institute and State University
- Brian M. Heaney, Professor, B.A., Yale University; M.A., The Ohio State University
- Jeff Koloze, Instructor, B.A., John Carroll University; M.A., Cleveland State University; Ph.D., Kent State University
- Lynn M. Mealy, Professor, B.A., Marian College; M.Ed., Wright State University
- David W. Miller, Associate Professor, M.S., Wright State University; Ph.D., The Ohio State University
- Fabian Novello, Assistant Professor, B.A., University of Illinois; M.S., Purdue University
- Jeffrey W. Reed, Instructor, A.L.B., Harvard University; M.A., Emory University; Ph.D., Emory University
- Robert T. Sweet, Associate Professor, B.A., Wright State University; M.A., University of Dayton; Ph.D., University of Cincinnati

#### Business and Applied Technologies Division

- Jane A. Cape, Dean, Assistant Professor, B.A., St. Francis College; M.Ed., Bowling Green State University
- Stephanie L. Gaston, Administrative Assistant to the Dean
- Jacquelyn Y. Robinson, Administrative Support
- Paulette Y. Saksa, Administrative Support
- Robert J. Adkins, Associate Professor, B.S., M.S., University of Toledo
- Teresa R. Campbell, Assistant Professor, B.S., M.B.A., Wright State University
- Marilyn J. Carlson, Professor, B.S., Central State University; M.Ed., Wright State University
- Susan F. Everett, Professor, B.S., Virginia Polytechnic and State University; M.S., Mississippi State University; Ph.D., Iowa State University
- Lawrence B. Everett, Assistant Professor, B.S., Iowa State University, M.B.A., University of Missouri-Columbia, M.S., Iowa State University, Ph.D., Iowa State University
- John O. Hale, Instructor, B.S., Park College; M.S., Central Michigan University

- Dan J. Heighton, Professor, B.B.A., University of Cincinnati; M.B.A., Wright State University
- Robyn M. Hennigan, RPR, CRI, Instructor, A.A.B., Clark State Community College
- Patrick S. Jacobs, Instructor, A.S., Clark State Community College
- L. R. Kelleher, Instructor, B.S., Wilmington College; M.Ed., Ohio University, CMfgE Certified
- Thomas R. Oliver, Assistant Professor, B.S., Bethany College; M.B.A., University of Cincinnati
- Deborah S. Peairs, Self-Paced Lab Coordinator, B.S., Wright State University
- Glen A. Pottenger, Instructor, A.S., The Ohio State University/ Agriculture Technical Institute
- William P. Schindler, Professor, B.S., M.B.A., University of Dayton
- Debra L. Smith, Realtime Reporting Instructor, A.A.B. Clark State Community College; RMR, B.A., Urbana University
- Gregory G. Teets, Instructor, A.A.S., Sinclair Community College
- Nancy D. Thornton, Professor, B.S., M.Ed., Wright State University
- T. Douglas Toles, Instructor, B.F.A., Miami University; M.A., Miami University
- Rebecca J. Wiggenhorn, Professor, A.A.B., Clark State Community College; B.S., Wright State University; M.A., Central Michigan University

#### Health and Human Services Division

- Kathleen J. Wilcox, Dean, Associate Professor, A.A.S., Sinclair Community College; B.S.N., M.S., Wright State University
- Julia Daniels, Administrative Assistant, A.A.B., Clark State Community College
- Nancy E. Lacey, Administrative Support, A.A.B., Bowling Green State University
- Matthew Malcuit, Health/Science Lab Assistant, A.A., Palomar College San Marcos, California
- Judy E. Adams, Instructor, R.N., Community Hospital School of Nursing; B.A., Antioch University; B.S.N., Franklin University; M.S., University of Dayton
- Mary C. Cornell, Instructor, R.N., Community Hospital of Nursing; B.S.N., Franklin University; M.S.N., University of Phoenix
- Terri L. Dinsmore, Instructor, B.S., University of Evansville, Indiana; M.H.S. University Indianapolis,
- Rebecca S. Dodds, Instructor, R.N., Community Hospital School of Nursing; B.A., Park College, Missouri, M.A., Antioch University McGregor
- Susan E. Doubt, Instructor, B.S., Truman State University; M.S.N., F.N.P., University of Missouri-Columbia
- Barbara T. Duane, Instructor, B.S., University of Maryland; M.S.N., University of Texas; J.D., Capital University
- Theresa B. Felder, Program Coordinator, B.S., Utica College of Syracuse University
- Paulette D. Grodner, Associate Professor, A.A.S., Clark State Community College; B.S.N., Franklin University; M.S., Wright State University
- Beth M. Gustafson, Assistant Professor, B.S., Quinnipiac College; M.S.Ed., University of Dayton
- Pamela M. Healy, Instructor, B.S., The Ohio State University; M.S., Antioch University McGregor
- Sandra J. Horn, Associate Professor, B.S., Pikeville College; M.S., Central Michigan University
- Ayman M. Idrees, MLT Instructor, B.S., University of Cincinnati; M.S., Wright State University

- Bridget C. Ingram, Assistant Professor, A.A.S., University of Akron; B.S., San Diego State University; M.Ed., Ashland University
- Lawrence N. Killian, Professor, B.S., Cedarville University; B.S., Central State University; M.S., Syracuse University; Ph.D., Wright State University
- Daisy H. Lilly, Temporary Full-time Instructor, R.N., Community Hospital School of Nursing
- Deborah S. Mickey, Early Language & Literacy Specialist, B.S., University of Cincinnati
- Connie E. Mitchell, Instructor, R.N., Community School of Nursing; B.S.N., Franklin University; M.Ed., Wittenberg University
- Veronica L. Peters, Associate Professor, B.S.N., Roberts Wesleyan College; M.Ed., University of Central Oklahoma
- Mark P. Schmidt, Instructor, B.S., Purdue University
- Lisa I. Sheehan, Instructor, A.A. Clark State Community College; B.S. University of Dayton; M.S., Wright State University
- Racille G. Smith, Assistant Professor, R.N., The Community Hospital School of Nursing; B.S.N., University of The State of New York; M.S.Ed., University of Dayton
- Donald B. Swabey, Instructor, LPN, EMT-P, A.A.S., Clark State Community College
- Mia D. Toles-Pickard, Nursing Skills Lab Instructor, B.S.N., University of Phoenix
- Kathleen L. Traub, Assistant Professor, R.N., St. Mary's Hospital School of Nursing; B.S.N., M.S., Wright State University
- Tammy J. Watt, Assistant Professor, B.S., Wright State University; M.S.W., The Ohio State University
- Barbara Yontz, Outreach Coordinator (OIA) Project, B.S., Kent State University

# **College Departments**

#### Academic and Student Affairs Office

- Andrew A. Runyan, VP, Academic & Student Affairs, B.M.E., University of Dayton; M.S., Kettering University; Ph.D., Nova Southeastern University
- Vicki J. Martin, Assistant to the Vice President, A.S., Miami-Jacobs Junior College

#### Academic Support Services

- Julie R. Baumann, Tutoring Assistant, A.A.B., Clark State Community College
- James A. Henry, Testing Technician, B.S., Urbana University Michael E. Sever, Advising & Articulation Coordinator, B.S., M.A., Wright State University
- Bonnie G. Young, Success Center Coordinator, A.A.S., Sinclair Community College; B.A., Antioch University, McGregor School

#### Admissions Office

- Julie A. Schaid, Director of Enrollment and Pre-College Programs, B.A., Miami University; M.S., Central Michigan University; Ph.D., University of Dayton
- Kimberly Y. Cole, Welcome Center Specialist, A.A.B., Clark State Community College
- Corey Holliday, Recruitment and Student Diversity Manager, B.S., Cumberland College
- Jamie L. Minteer, Admissions Specialist, B.A., The Ohio State
- Patricia W. Shafer, Data Management Technician, A.A.B., Clark State Community College

#### **Business & Industry Training**

Teresa A. Mabry, Director, Business and Industry, B.A., Wittenberg University; M.S., University of Dayton

Horace M. Gladney, Manager, Industrial Services, B.S., Kansas State University; B.S., Mississippi State University; M.S., Air Force Institute of Technology

Paulette Y. Saksa, Administrative Support

James W. Wahl, Program Manager, B.S., M.S., The Ohio State University; Ed.S., Wright State University

#### Bookstore and Office Services

Holly J. Snyder, Manager, Bookstore and Office Services, A.A.B., Clark State Community College; B.A., Antioch University; M.S., Central Michigan University

Susan M. Elliott, Bookstore Clerk Cynthia M. Hill, Bookstore Buyer

Tina D. Pacine, Office Services Clerk

# **Business Affairs Office**

Joseph R. Jackson, Vice President for Business Affairs, B.B.A., Ohio University

Angela D. Edwards, Assistant to the Vice President

#### **Business Office**

Dixie A. Depew, Controller, B.S., The Ohio State University Tambry L. Kegley, Accounts Receivable Technician I, A.A.B., Clark State Community College

Peggy J. Marshall, Accounts Receivable Technician II Carrie L. Weinstiger, Accounts Payable/Purchasing Technician I Tori T. Westrick, Staff Accountant, B.S.B., Wright State University

#### Campus Police Department

Lynnette A. Rodrigue, Chief, Campus Police, A.A.S., Clark State Community College; B.A., Wright State University; M.S., University of Akron Mark D. Lopez, Police Officer II, A.A. S., Clark State

Mark D. Lopez, Police Officer II, A.A. S., Clark State Community College

#### Career Services

Mary M. Patton, Professor, Director, Career Services/ Community Outreach, B.S., Lesley College; M.S., Western Illinois University

Dana L. Kapp, Career Services Technician, A.A., Three Rivers Technical College; A.A.B., Clark State Community College Amy L. Sues, Career Specialist, B.S., Ohio University; M.S., Ohio University

#### College Relations

- Kristin J. Culp, Director of College Relations, Executive Director of the Foundation, B.A., Wittenberg University; M.S., University of Dayton
- Stephen R. Button, Graphic Artist, B.A., Wittenberg University
- Troy R. Donnerberg, Marketing Specialist, B.S., Wright State University
- Kimberly A. Frazier, Manager, Grants Development and Special Projects, B.A., University of Cincinnati; M.A., Boston University
- Kathryn I. Sahle, Director of Marketing, B.A., Wright State University

College Tech Prep

 Julie A. Schaid, Director of Enrollment and Pre-College Programs, B.A., Miami University; M.S., Central Michigan University; Ph.D., University of Dayton
 Melissa M. Griever, Tech Prep Technician

**Computing Services** 

- Romy E. Lu, Director, Information Technology, B.S., Mapua Institute of Technology; M.B.A., M.S., Wright State University
- William J. Blake, Senior Network Specialist, B.S., University of Cincinnati, A+ Certification, Network+, Certified Novell Administrator
- Christa Bostick, Administrative Support, A.A.B., Clark State Community College
- Shane B. Bucher, Senior Computer Technician, A.A.B. Networking; A.A.B. Software, Clark State Community College
- Angela M. Davis, Network Specialist, A.A.B., Clark State Community College; B.A., Wittenberg University
- Lynn T. Fernando, Manager, Administrative Systems, B.S., University of Moratuwa, Sri Lanka; M.S., Bowling Green State University, Ohio
- James W. Gossett, PC/Network Manager, B.S.E.E., The University of Cincinnati; M.B.A., Wright State University

Steve D. Hurley, Web Administrator

Kevin E. Jones, Computer Technician

Laurie S. Means, Web Developer, A.A.B., Clark State Community College

- Cynthia Miller, PT Computer Technician, B.S., Philander Smith College; A.A.S., East Arkansas Community College
- Timothy J. Newberry, Computer Technician, A.A., ITT Technical Institute
- Jennifer J. Nickell, Institutional Research Specialist, A.A.B., Clark State Community College

Shirley K. Schetter, Systems Administrator

Wali S. Shamsid-Deen, Computer Technician, A.A.S., Devry Institute of Technology

#### Conference Services

Administrative Assistant - vacant

Continuing Education

Richard A. Starr, Director of Continuing Education, Associate Professor, A.B., Eastern Kentucky University; M.A., Ball State University

Paulette Y. Saksa, Administrative Support

Counseling Office

- Kandyce K. Meo, Director of Counseling & Academic Support Services, Professor, B.S., Fairmont State College; M.A., West Virginia University; Ed.D., Virginia Polytechnic Institute and State University
- Wendy R. Cromer, Athletics & Activities Coordinator, B.F.A., Ohio Northern University
- Debra E. Ingling, Administrative Assistant, A.A.B., Clark State Community College
- Marianne R. Kaiser, Disability/Retention Specialist, A.A.S., Ohio University; B.S., Ohio University
- Mary L. Pirozok, Associate Professor, A.A.S., Clark State Community College; B.S., Antioch University; M.S., Wright State University

#### Financial Aid Office

- Kathy A. Klay, Director of Financial Aid, B.A., Wright State University
- Beverly A. Stevens, Assistant Director of Financial Aid, A.A.B., Clark State Community College; B.S., Wilberforce University
- Laura K. Williams, Financial Aid Specialist, A.A.B., Clark State Community College; B.S., Franklin University
- Renee L. Young, Welcome Center Specialist, A.A. B., Clark State Community College

#### Foundation

- Kristin J. Culp, Executive Director of the Foundation, B.A., Wittenberg University; M.S., University of Dayton
- Sharon M. Luster, Development Assistant, B.A., Otterbein College
- Patricia W. Shafer, Data Management Technician, A.A.B., Clark State Community College

### Grounds

- Amanda S. Honeycutt, Manager, Grounds, A.A.S., Clark State Community College
- Richard F. Cochenour, Groundskeeper/Custodian, A.A.S., Clark State Community College

#### Health Clinic

Roberta L. Richards, Health Clinic Nurse, B.S.N., University of Akron

#### **Human Resources**

Manager, Human Resources - vacant

Teresa A. Kelble, Payroll Technician, B.S., Wright State University

Mary H. Murphy, Human Resources Specialist II

#### Library

- Mary Beth Aust-Keefer, Dean of Library and Educational Resources, B.A., Kent State University; M.L.S., Kent State University,
- G. James Hebner, Media Services Specialist, A.A.S., Monroe Community College
- Angela R. Henry, Library Reference Assistant, B.A., Ohio University
- Melissa B. Hunter, Technical Services Specialist, B.A., Antioch University - McGregor
- Clarence E. Maise, Instructional Design Specialist, A.A.S., Phillips College; A.A.S., Arkansas State University; B.S. Southern Illinois University; M. Ed., Southern Illinois University
- Catherine L. Wilson, Circulation Specialist, B.A., Wright State University

#### Performing Arts Center

Katherine L. Eckstrand, Executive Director, Performing Arts Center, B.A., Wilmington College;

M.A., DePaul University

Lori M. Common, Administrative Assistant

- Karen S. Clark, House/Operations Manager, B.S., University of Montevallo
- Beth R. Dixon, Community Outreach and Education Specialist, B.A., Miami University
- James D. Hunt, Technical Director and Assistant Professor, B.A., Wilmington College;

M.A., Miami University

Community Outreach/Education Director - vacant

Geoffrey D. Moss, Assistant Technical Director, B.F.A., Wright State University

ampus Directory

Jock T. Pierman, Assistant Technical Director, A.A., Southern Ohio College

Marylu Shobe, Box Office Manager

Petra N. Thompson, Assistant Box Office Manager

#### Physical Plant

Director of Facilities, Operations & Maintenance - vacant

Judy K. Ramirez, Head Custodian

Ronald Applin, Shipping and Receiving Clerk

Joseph C. Brewer, Maintenance Worker

William T. Brown, Custodian

Mark A. Brush, Custodian

Katrina A. Davis, Custodian

W. Scott Donaldson, Custodian

Glen S. Marsh, Custodian

Mark A. McCarty, Maintenance Worker

Richard A. Moore, Custodian

Wendy A. Neumann, Custodian

Vinnie J. Osborne, Custodian

Gregory A. Ping, Custodian

John L. Smith, Jr., Custodian, Maintenance Worker, HVAC-R Certification

Kent C. Thomas, Custodian

#### President's Office

Karen E. Rafinski, President, B.S., Moorhead State University; M.S., University of Washington; M.P.A., Harvard University; Ph.D., University of Minnesota

Mellanie K. Toles, Assistant to the President, A.A.S., Bradford School of Business

### Receptionists

Georgia H. Hagerman, Receptionist, A.A. Clark State Community College

Katherine S. Trout, BEC Evening Receptionist

#### Records and Registration Office

Elizabeth C. Deger, Registrar, B.S., Bowling Green State University, M.A., University of Denver

Kay Estep, Records Clerk

Linda E. Rueger, Records Clerk, A.A.B., Clark State Community College, B.A., Capital University

Susan D. Zelinski, Student Records Specialist, A.A.B., Clark State Community College

#### Student Affairs

Thomas K. Marshall, Dean of Student Affairs and Enrollment Management, B.S., M.S.,

Southern Illinois University; Ph.D., Ohio University

Wendy R. Cromer, Activities Assistant, B.F.A., Ohio Northern University

Debra E. Ingling, Administrative Assistant, A.A.B., Clark State Community College

#### Student Support Services

Leigh A. Fisher, Project Director, B.A., Wittenberg University; M.S., Wright State University

Eeva K. Duddleston, Academic Coordinator, B.A., Uppsala University, Uppsala, Sweden

Kyle J. Heincker, Counselor, B.A., University of Missouri-Columbia; M.A., University of Dayton

Brenda D. Justice, Customer Service Specialist, A.A. B., Mount Vernon Nazarene University

#### Truck Driver Training Institute

Director, TDTI - vacant

Mary C. Bullwinkel, Administrative Support

Merrill E. Bageant, Recruiter

Dennis R. Bailey, Trainer

Tammy J. Colaric, Trainer

Gregory A. Fisher, Trainer

Thomas W. Hicswa, Classroom Trainer

Terrance D. King, Trainer

Ronald A. Langford, Trainer

Charles E. Thompson, Training Site Operations Supervisor

Thomas F. Vass, Trainer

#### Workforce Investment Board

Patricia A. Garrison, Executive Director, Area 7, University California, Santa Barbara; M.S., University of Dayton Duane E. Hodge, Regional Representative, Area 7, B.B.A., Park University; M.B.A., Franklin University Lynn L. Rambo, Office Manager, Area 7

# **Advisory Committees**

#### Accounting

Tammy Adkins, Speedway/SuperAmerica Robert Dwyer, Family Services of Clark/Champaign County Julie Griffin, Taylor, Applegate, Hughes & Associates Connie Henson, AdCare Health Systems Denny Kummerer, Speedway/SuperAmerica Lori Riley, Champaign Residential Services

# Agriculture Business/Horticulture Industries

Pam Bennett, Clark County Extension Office Tim Brennan, Brennans Lawn Maintenance Pam Call

James Corbet

Ron Cramer, The Siebenthaler Company Thomas Dietrich, Five Rivers Metro Parks

Chris Goecke, WGC Golf Course

Michelle Griffith

Mark Grunkemeyer, Buckeye Ecocare

Amanda Honeycut, Clark State Community College

Gary King, Ohio AgriBusiness Association

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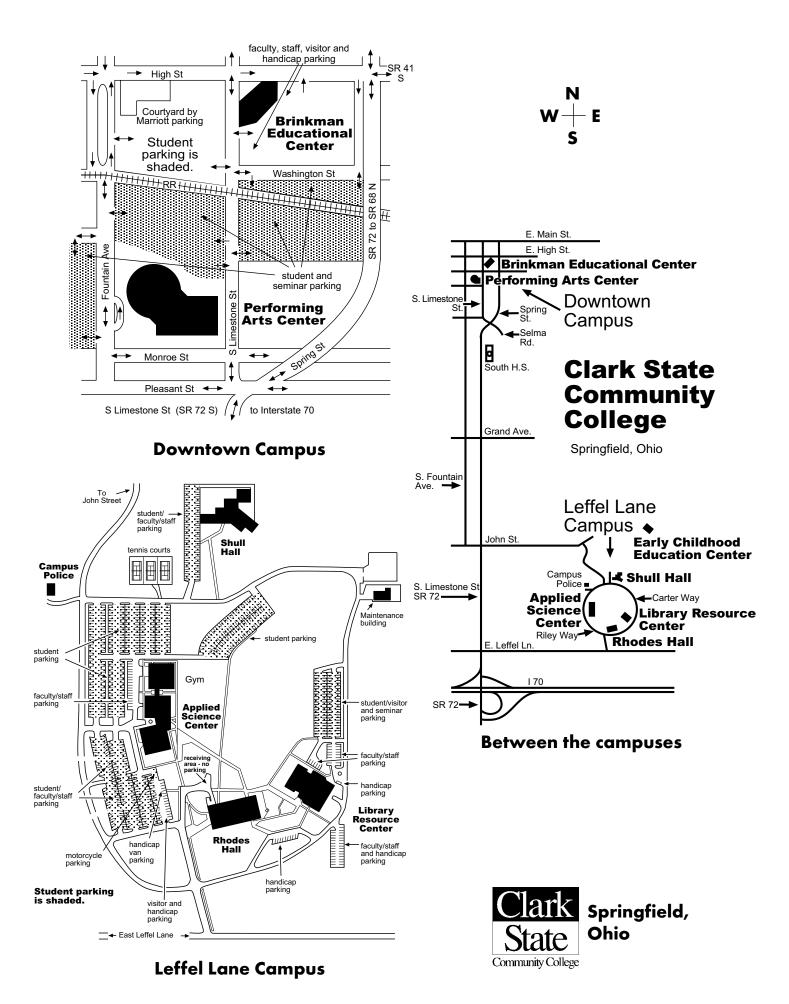
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# NOTES

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