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Welcome to Clark State

Hello!

We're delighted to welcome you to the Clark State family.

It's a family of staff and faculty with one mission: your success. It's also a family of students who, as you will see, represent many ages and backgrounds, with diverse educational objectives. I think you will find the discussions and relationships you share with your fellow students to be among the most rewarding aspects of your educational experience at Clark State.

We hope you will find this catalog helpful to you in learning about your course of study, as well as about the many services and activities available to make the most of your Clark State experience. You'll like the great instruction, personal attention and convenience we offer.

We want you to have an enjoyable learning experience and urge you to let us help you build toward your own success.

Best wishes for a great year at Clark State. I look forward to seeing you on campus.

Sincerely,

Karen E. Rafinski

Karen Nagle Rafinski, Ph.D.
President

Volume XXXI June 2001

This catalog was prepared prior to the 2001-2002 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's affirmative action policy 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.

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.

Today Clark State looks proudly at its past 39 years of service and eagerly toward its 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 examiniations, 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.

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 Court 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, 65 South Front Street, Columbus, OH 43215, 614/466-3593. The Registered Nursing program is approved by the Ohio Board of Nursing and accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006. The Practical Nursing program is approved by the Ohio Board of Regents and the Ohio Board of Nursing. 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. 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. 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.

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
Horticultural Industries Technologies	
Golf Course Maintenance Option	AAS
Landscaping and Nursery Operations Option	AAS
Turf and Landscape Maintenance Option	AAS

Business Technologies

Accounting Technology	AAB
Business Management Technology	AAB
Electronic Business Option	AAB
Court Reporting Technology	AAB
Graphic Design Technology	AAB
Computer Software Development	AAB
Web Development Option	AAB

Network Administration Technology	AAB
Office Systems Software Option	AAB
Technical Support Option	AAB
Legal Assisting (1st year)	
Office Administration Technologies	
Medical Office Administration	AAB
Office Administration	AAB
Engineering Technologies	
CAD Drafting Technology	AAS
Industrial Technology	
Electrical Maintenance Technology	AAS
Manufacturing Engineering Technology	
Mechanical Engineering Option	AAS
Health Technologies	
Emergency Medical Services/Paramedic Technology	AAS
Exercise Science Technology	AAS
Medical Laboratory Technology	AAS
Nursing Transition LPN to RN	AAS
Physical Therapist Assistant Technology	AAS
Registered Nursing Technology	AAS
Public Services Technologies	
Corrections Technology	AAS
Criminal Justice Technology	AAS
Early Childhood Education	AAS
Early Childhood Education Administration Option	AAS
Social Services Technology	AAS

Certificate Programs

Accounting
Business Management
Computer-Aided Design
Construction
Industrial Technology
  Electrical Maintenance
Manufacturing
Multi-Skilled Health Care
Office Administration
Paramedic
Photography
Practical Nursing

Associate of Technical Studies

Clark State also offers an Associate of Technical Studies degree if your career needs are not met by one of our technical degree programs. The flexibility of this program permits you to work with an advisor to construct an 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 nontechnical courses, 45 credit hours of technical courses and 9 credit hours of electives.

General Education

General education is integral to the present and future success of students in all programs of study at Clark State Community College. It is a general body of common knowledge, concepts and attitudes essential to functioning effectively in a complex and diverse world. General education, also referred to as CORE (common outcomes required in education) by the faculty, supports learners in their journey toward lifelong fulfillment by encourageing development in the areas of: Communication/interpersonal skills, methods of inquiry, culture and human awareness and personal development skills.

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, we also require that at least one of these four general education courses contains 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*
ECO 250 Comparative Economics (GA)
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 261 Regional Studies: Asia–Japan (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

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)
ENG 241 Poetry (GA)
ENG 243 Fiction (GA)
ENG 245 Drama (GA)
ENG 250 American Literature
ENG 261 British Literature to 1700 (GA)
ENG 262 British Literature 1700-present (GA)
HON 291 Science & Religion
HST 111 Western Civilization through the 14th Century (GA)
HST 112 Western Civilization from the 14th through the 18th Century (GA)
HST 113 Western Civilization from the 19th Century to the Present (GA)
HST 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 Culture (GA)
HUM 299 Capstone Seminar
MUS 130 Music Appreciation (GA)
PHL 110 Problems in Philosophy (GA)
PHL 200 Practical 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)
THE 105 Oral Interpretation of Literature
THE 130 Introduction to Theatre (GA)
THE 270 Theatre History I (GA)
THE 271 Theatre History II (GA)

*ECO 110 cannot be used as a general education elective for the Accounting, Business Management or Electronic 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 and honors programs, and 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
Cincinnati Art Academy
DeVry Institute of Technology
Eastern Kentucky University (Law Enforcement)
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 Toledo
Urbana University
Wilberforce University
Wittenberg University
Wright State University

(Course equivalents exist with Miami University and Ohio University.)

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.

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, 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 D 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 114 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 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.

ENG 111	English I	4
ENG 112	English II	4
ENG 221	Business Communications	3
ENG 223	Technical Report Writing	3
ENG 225	Creative Writing	3
ENG 227	Intermediate Composition	3

Mathematics

Complete a minimum of three quarter hours chosen from:

MTH 105	Mathematics and Today's World	3
MTH 112	Technical Math	3
MTH 121	College Algebra I	3
MTH 122	College Algebra II	3
MTH 140	Trigonometry	3
MTH 211	Technical Calculus I	4
MTH 212	Technical Calculus II	4
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 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

HST 111	Western Civilization through the 14th Century	3
HST 112	Western Civilization from the 14th though the 18th Century	3
HST 113	Western Civilization from the l9th Century to the Present	3
HST 121	American History to 1810	3
HST 122	American History 1810-1900	3
HST 123	American History 1900-Present	3
PHL 110	Problems in Philosophy	3
PHL 200	Practical Logic	3
PHL 210	Ethics	3
PHL 220	Business Ethics	3
PHL 230	Medical Ethics	3
PHL 240	Philosophy of World Religions	3
PHL 250	Great Books: Philosophy	3

Social and Behavioral Sciences

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

ECO 110	General Economics	3
ECO 221	Principles of Macroeconomics	3
ECO 222	Principles of Microeconomics	3
GEO 110	World Human Geography	3
GEO 220	World Regional Geography	3
PLS 110	American National Government	3
PLS 120	American Issues	3
PLS 130	Political Issues	3
PLS 220	Constitutional Law	3
PSY 111	Psychology I	3
PSY 112	Psychology II	3
PSY 221	Human Growth & Development I	3
PSY 222	Human Growth & Development II	3
PSY 230	Abnormal Psychology	3
RST 260	Regional Studies: China	3
RST 261	Regional Studies: Japan	3
RST 262	Regional Studies: India	3
RST 270	Regional Studies: Africa	3
RST 280	Regional Studies: Latin America	3
SOC 110	Sociology	3
SOC 140	Marriage and Family	3
SOC 220	Comparing Cultures	3
SOC 230	Social Problems	3
SOC 240	Racial and Cultural Minorities	3

Natural and Physical Sciences

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

BIO 110	Fundamentals of Human Biology	4
BIO 111	Biology I	4
BIO 112	Biology II	4
BIO 113	Biology III	4
*BIO 121	Anatomy & Physiology I	4
BIO 122	Anatomy & Physiology II	4
BIO 123	Anatomy & Physiology III	4
BIO 131	Microbiology	4
BIO 140	Plant Science	4
CHM 110	Fundamentals of Chemistry	5
*CHM 121	General Chemistry I	5
CHM 122	General Chemistry II	5
CHM 123	General Chemistry III	5
CHM 211	Organic Chemistry I	5
CHM 212	Organic Chemistry II	5
CHM 213	Organic Chemistry III	5
*GLG 111	Geology I	4
GLG 112	Geology II	4
GLG 113	Geology III	4
GLG 121	Meteorology	4
PHY 110	Fundamentals of Physics	5
PHY 111	Technical Physics I	4
PHY 112	Technical Physics II	4
PHY 113	Technical Physics III	4
*PHY 250	General Physics I	6
PHY 251	General Physics II	5
PHY 252	General Physics III	5

Degree Programs

Accounting

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 full-time students who have completed all prerequisites and who have no developmental 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.

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

Program Goals

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.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
ACC 111	Principles of Accounting I	4
BUS 105	Introduction to Business	3
ENG 111	English I	4
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3
Winter		
ACC 112	Principles of Accounting II	4
BUS 112	Principles of Business Management	4
BUS 260	Business Law	3
ENG 112	English II	4
ITS 12S	Beginning Spreadsheet	1
Spring		
ACC 113	Principles of Accounting III	4
ACC 120	Microcomputer Accounting Systems	4
BUS –	Business Elective*	3
COM 121	Effective Speaking	3
ENG 221	Business Communications	3
Fall		
ACC 211	Intermediate Accounting I	4
ACC 221	Tax Accounting I	4
BUS 266	Quantitative Business Methods	4
ITS 12D	Beginning Database	1
– –	Social Science Elective	3
Winter		
ACC 212	Intermediate Accounting II	4
ACC 222	Tax Accounting II	4
BUS 270	Business Finance	4
ECO 221	Principles of Macroeconomics	3
– –	Humanities/Social Science Elective	3
Spring		
ACC 213	Intermediate Accounting III	4
ACC 233	Cost Accounting	4
ACC 250	Gov't and Non-Profit Accounting	4
ECO 222	Principles of Microeconomics	3
– –	Humanities/Social Science Elective	3
	Total credit hours	102

*Any course not already prescribed from BUS, CSD, ITS, MTH, NTK, OAD, RES or Co-op. ITS 080 cannot be used as an elective.

The following co-op experiences may be substituted for technical courses as indicated: EBE 285 Co-op Education I and EBE 287 Co-op Seminar I for Business elective and EBE 286 Co-op Education II and EBE 297 Co-op Seminar II for BUS 270 Business Finance.

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 full-time students who have completed all prerequisites and who have no developmental 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.

Course Number	*Course Title*	*Credit Hours*
Fall		
ACC 111	Principles of Accounting I	4
ACC –	Accounting Elective*	4
BUS 105	Introduction to Business	3
ENG 111	English I	4
ITS 103	Information Technology Basics	3
Winter		
ACC 112	Principles of Accounting II	4
BUS 260	Business Law	3
ENG 112	English II	4
ITS 12S	Beginning Spreadsheet	1
MTH 106	Business Mathematics	3
Spring		
ACC 113	Principles of Accounting III	4
ACC 120	Microcomputer Accounting Systems	4
BUS –	Business Elective*	3
COM 121	Effective Speaking	3
ENG 221	Business Communications	3
	Total credit hours	50

*Any course not already prescribed from ACC, BUS, CSD, ITS, MTH, NTK, OAD, RES or Co-op. ITS 080 cannot be used as an elective.

Agricultural Business

The Agricultural Business program emphasizes preparation for agriculture service industry occupations. Courses are offered in soil science, animal health and nutrition, 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 developmental recommendations. Many individuals, especially part-time students and those taking developmental courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

Program Goals

Upon completion of an associate degree in Agricultural Business, 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 busines plan.
- locate current information in solving technical problems.
- demonstrate effective employability skills.
- demonstrate basic sales principles.

Scholastic Preparation

Basic high school math, English, chemistry, biology and keyboarding skills are strongly recommended. If these requirements are not met, preparatory courses will need to be taken at Clark State.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Name*	*Credit Hours*
Fall		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 150	Soil Science	4
AGR –	Ag/Hort Elective*	3
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
Winter		
AGR 105	Principles of Ag Sales I	3
AGR 151	Soil Fertility	4
BIO 140	Plant Science	4
ENG 112	English II	4
MTH 106	Business Mathematics	3
Spring		
AGR 194	Agribusiness Co-op Experience I	4
Summer		
AGR 213	Animal Nutrition	4
AGR 214	Crop Production	4
Fall		
AGR 122	Plant Pests	4
AGR 174	Agribusiness Principles	3
AGR 262	International Ag Trade	3
AGR 273	Ag Economics/Finance	3
ACC 111	Accounting I	4
Winter		
AGR 106	Principles of Ag Sales II	3
AGR 253	Pest Managment	5
COM 121	Effective Speaking	3
ENG 223	Technical Report Writing	3
– –	Social Science Elective	3
Spring		
AGR 206	Agribusiness Marketing	3
AGR 284	Agribusiness Management	4
AGR –	Ag/Hort Elective*	3
– –	Humanities/Social Science Elective	3
– –	Humanities/Social Science Elective	3
	Total credit hours	97

*Ag/Hort electives may be any AGR course not required in the program. Other coursework 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 on this page.

The remaining credit hours are divided among a Personal Growth course, an area of concentration and electives. Personal Growth courses provide students with special assistance at an appropriate point in their coursework at 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.

Program Goals

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 tearms.
- identify problems or issues; to identify possible resources; to access resources, to gather data and organize information; to analyze data/evaluate information gathered; and to 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)

English I and English II

Area 2 - Literature and the Arts (9 credit hours)

Three courses, at least one of which is chosen from Art (Appreciation of the Arts or Art History I, II or III), Theatre (Oral Interpretation Introduction to Theatre, Theatre History I or II) or Music (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 131, BIO 140, CHM 110, GLG 110, GLG 114, GLG 121, PHY 110, 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 4.

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 an 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 on this page.

The remaining credit hours are divided among a Personal Growth course, an area of concentration and electives. Personal Growth courses provide students with special assistance at an appropriate point in their coursework at 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.

Program Goals

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 tearms.
- identify problems or issues; to identify possible resources; to access resources, to gather data and organize information; to analyze data/evaluate information gathered; and to 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)

English I and English II

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

Two courses, at least one of which is chosen from Art (Appreciation of the Arts or Art History I, II or III), Theatre (Oral Interpretation Introduction to Theatre, Theatre History I or II) or Music (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)

Fourt 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 131, BIO 140, CHM 110, GLG 110, GLG 121, PHY 110, 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

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Capstone Seminar

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

Business Management

The Business Management curriculum provides a well-rounded education consisting of basic courses in accounting, information technology, economics, finance, business law, management, marketing, interpersonal and customer service skills and communications.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

- demonstrate understanding of and apply basic business and management concepts, skills and tools.
- demonstrate communications and human relations knowledge and skills.
- analyze quantitative data.
- demonstrate understanding of ethical, social responsibility and legal issues.
- demonstrate understanding of international business issues.
- demonstrate information technology skills.

Degree Availability

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

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
BUS 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		
BUS 106	Human Relations and Organizational Behavior	4
BUS 112	Principles of Business Management	4
BUS –	Business Elective** *or* EBE 100	2
ACC 112	Principles of Accounting II	4
ENG 112	English II	4
Spring		
BUS 200	Customer Service	4
ACC 113	Principles of Accounting III	4
COM 121	Effective Speaking	3
ENG 221	Business Communications	3
ITS 12D	Beginning Database*	1
ITS 12S	Beginning Spreadsheet*	1
Fall		
BUS 243	Principles of Marketing	4
BUS 266	Quantitative Business Methods	4
	or	
STT 264	Statistics I	4
BUS –	Business Elective** *or* Co-op Experience	4
ECO 221	Principles of Macroeconomics	3
– –	Social Science Elective	3
Winter		
BUS 260	Business Law	3
BUS 270	Business Finance	4
ECO 222	Principles of Microeconomics	3
– –	Humanities/Social Science Elective	3
– –	Humanities/Social Science Elective	3
Spring		
BUS 225	Human Resource Management	3
BUS 250	Leadership in Organizations	4
BUS 272	Productions/Operations Management	3
BUS 290	Business Seminar	4
BUS –	Business Elective** *or* Co-op Experience	4
	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.

**Business electives include courses which are not already required for the Business Management program and carry ACC, BUS, CSD, ITS, NTK, OAD or RES prefixes. ITS 080 cannot be used as an elective. Students wishing to complete one or more co-op experiences must take EBE 100 as a business elective prior to the co-op experience.

Electronic Business Option

The Electronic Business option provides students with a well-rounded education in business management with a focus in management of the electronic business. The broad education in business management is enhanced with courses in electronic business and information technology, to provide knowledge and skill necessary for e-business management.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

- demonstrate understanding of and apply basic business and management concepts, skills and tools.
- demonstrate communications and human relations knowledge and skills.
- analyze quantitative data.
- demonstrate understanding of ethical, social responsibility and legal issues.
- demonstrate understanding of international business issues.
- demonstrate information technology skills, including the use of Internet resources and tools.
- demonstrate knowledge of electronic business theories and concepts through electronic business site analysis.

Degree Availability

The Electronic Business option is available during the day and in the evening. Students should consult with their advisor for the recommended sequencing of evening courses.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	Course Title	Credit Hours
Fall		
BUS 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		
BUS 106	Human Relations and Organizational Behavior	4
BUS 112	Principles of Business Management	4
ACC 112	Principles of Accounting II	4
NTK 152	Internet Technologies	5
Spring		
BUS 200	Customer Service	4
ACC 113	Principles of Accounting III	4
COM 121	Effective Speaking	3
ENG 112	English II	4
ENG 221	Business Communications	3
Fall		
BUS 243	Principles of Marketing	4
BUS 266	Quantitative Business Methods	4
	or	
STT 264	Statistics I	4
ECO 221	Principles of Macroeconomics	3
GPH 105	Design Fundamentals	3
ITS 12D	Beginning Database*	1
ITS 12S	Beginning Spreadsheet*	1
Winter		
BUS 140	Introduction to Electronic Business	3
BUS 260	Business Law	3
BUS 270	Business Finance	4
– –	Social Science Elective	3
– –	Humanities/Social Science Elective	3
Spring		
BUS 142	Electronic Business Applications	3
BUS 225	Human Resource Management	3
BUS 250	Leadership in Organizations	4
BUS 290	Business Seminar	4
– –	Humanities/Social Science Elective	3
	Total credit hours	101

*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.

Business Management Certificate

The Business Management certificate provides students with an overview of the business environment and a background in 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 Business Management.

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 full-time students who have completed all prerequisites and who have no developmental recommendations. Many individuals, especially part-time students and those taking developmental 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		
BUS 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		
BUS 106	Human Relations and Organizational Behavior	4
BUS 112	Principles of Business Management	4
ACC 112	Principles of Accounting II	4
ENG 112	English II	4
ITS 12D	Beginning Database	1
Spring		
BUS 200	Customer Service	4
BUS –	Business Elective*	3
ACC 113	Principles of Accounting III	4
COM 121	Effective Speaking	3
ENG 221	Business Communications	3
	Total credit hours	51

*Business electives include courses which are not required for the Business Management certificate and carry BUS, ACC, CSD, ITS, NTK, OAD or RES prefixes. ITS 080 cannot be used as an elective.

CAD Drafting Technology

Students completing an associate degree in CAD Drafting Technology are qualifed to play a support role to the engineering professions in industrial, research and academic areas preparing blueprints, layouts, bills of materials, manufacturing and product support documentation. In addition to applied technical courses, CAD Drafting Technology includes an optional co-op experience. Training in the area of computer-aided drafting is also included. Students are responsible for finding an industry-related work experience and documenting how that experience has expanded their understanding of the career field.

Most of the first-year courses are offered as both day and evening sections. It is intended that the programs can be completed by taking courses in the evening on a part-time basis. Students may be required to take evening classes to complete the program since day sections may not be offered for some of the second-year courses.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

Upon completion of an associate degree in CAD Drafting Technology, a graduate will be able to:

- produce a finished product per quality specifications provided by the instructor 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/mainenance 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.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
DFT 102	Drafting II	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	2
MTH 101	Technical Math Applications A	1
QET 101	Metrology I	2
Winter		
DFT 211	Computer-Aided Design I	4
ENG 112	English II	4
MAT 110	Manufacturing Processes	3
MAT 111	Manufacturing Laboratory	2
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
Spring		
DFT 212	Computer-Aided Design II	4
ENG 223	Technical Report Writing	3
ENT 111	Engineering Materials	3
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3
PHY 111	Technical Physics I	4
Fall		
DFT 103	Descriptive Geometry	4
ENT 205	Circuits and Machines	4
MET 211	Statics	3
PHY 112	Technical Physics II	4
Winter		
DFT 214	AutoCAD Solids	4
COM 121	Effective Speaking	3
MET 213	Strength of Materials	4
PSY 111	Psychology I*	3
– –	Technical Elective**	2
Spring		
DFT 203	Technical Publication	4
SOC 110	Sociology*	3
ECO 110	General Economics*	3
– –	Technical Elective**	4
	Total credit hours	95

*Other humanities/social science electives may be substituted.

**Students must select a minimum of six credits of technical elective coursework from the following to complete graduation requirements: DFT 111, DFT 215, EBE 100 (only if EBE 285 is selected), EBE 285, ENT 212, INT 140, INT 253, INT 255, INT 260, INT 280, MAT 112, MET 212, MET 231, MET 241, MET 261. Other technical coursework may be approved by the division.

Computer-Aided Design (CAD) Certificate

The Computer-Aided Design (CAD) Certificate is designed to provide the technical background necessary to produce mechanical drawings using both manual and computer-aided drafting techniques. Manufacturing coursework is included to help students understand the principles of manufacturability in mechanical design.

Certificate programs are designed for those students who seek to enhance their job-related skills in a specialized area. These certificates are typically a portion of the courses in one of the associate degree programs. Certificate programs will take somewhat longer than one year to complete due to the sequence of prerequisites and the terms in which courses are offered. Coursework included in a certificate program may ultimately be applied for the associate degree in the related technology program.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

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 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*
Fall		
DFT 102	Drafting II	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
MTH 101	Technical Math Applications A	1
QET 101	Metrology I	2
Winter		
DFT 211	Computer-Aided Design I	4
MAT 110	Manufacturing Processes	3
MAT 111	Manufacturing Laboratory	2
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
Spring		
DFT 212	Computer-Aided Design II	4
ENT 111	Engineering Materials	3
MTH 108	Technical Math Applications C	1
MTH 140	College Trigonometry	3
Fall		
DFT 103	Descriptive Geometry	4
Winter		
DFT 214	AutoCad Solids	4
	Total credit hours	48

Construction Certificate

This certificate prepares the students for leadership positions in the construction industry. Students completing the program are trained to implement the designs of architects and ingineers on time, on budget, to print, and of the desired quality. The construction certificate program provides education and training for careers in the construction industry as foreman, team leader, safety officer, jr. estimator, expediter, scheduler and other positions required to complete the construction projects. Employment may be with firms specializing in general construction, heavy/highway/utility construction, building construction, mechanical and electrical contracting, HVAC, specialty contracting and consulting.

Scholastic Preparation

Students starting the program should have had one year each of high school algebra, trigonometry and physics or equivalent. Students may take these preparatory courses at Clark State but will require a longer amount of time to complete their degree program. Students who have not had high school physics must complete PHY 110 Fundamentals of Physics.

Course Number	*Course Title*	*Credit Hours*
Fall		
BUS 106	Human Relations and Organizational Behavior	4
DFT 101	Drafting I	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
MTH 101	Technical Math Applications A	1
Winter		
BUS 112	Principles of Business Management	4
DFT 111	Architecture I	4
DFT 211	Computer Aided Design I	4
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
Spring		
CET 203	Construction Methods	4
CET 221	Soil Mechanics	4
DFT 112	Architecture II	4
ENT 111	Engineering Materials	3
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3
	Total credit hours	53

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 developmental 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.

Program Goals

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

- have an understanding of the functions of corrections/ prisons in the criminal justice system.
- perform the basic duties of a corrections officer in an adult prison environment.
- perform the basic duties of a corrections officer in a juvenile prison facility.
- have an understanding of the effects of drug dependency on inmates and the general jail population.
- have an appreciation for the role of a police officer and how that will interact with the role of a corrections officer.

Prerequisites

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

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
CRJ 100	Intro to Criminal Justice	4
CRJ 116	Systems Approach to Computer Technology	3
COR 100	Intro to Corrections	4
ENG 111	English I	4
SWK 105	Chemical Dependency I	4
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	Adult/Juvenile Corrections	4
ENG 223	Technical Report Writing	3
SOC 110	Sociology	3
SOC 240	Racial and Cultural Minorities	3
Fall		
COR 280	Jail Practicum	4
PHL 240	Philosophy of World Religions	3
PLS 220	Constitutional Law	3
PSY 230	Abnormal Psychology	3
Winter		
CRJ 226	Interview and Interrogation	3
CRJ 228	Criminal Investigations	3
CRJ 231	Criminal Law	3
COR 281	Juvenile Institutions Practicum	4
Spring		
CRJ 230	Social Justice	3
CRJ 250	Community Resources	3
COR 282	Adult Institutions Practicum	4
	Total credit hours	91

Court Reporting

Court reporters record the verbatim proceedings of a courtroom, deposition, hearing, arbitration or meeting and provide an accurate transcript of the proceedings. In addition, court reporters today pursue alternative careers as captioning experts and rapid data operators. They also work in classrooms capturing teacher lectures for the benefit of hearing-impaired and physically challenged students who follow along on computer screens.

Clark State students are taught to prepare transcripts with the assistance of a computer and are taught to write realtime in a mock computer-integrated courtroom.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

- 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.
- prepare a complete trial transcript using computer-aided transcription.
- write real-time in a computer-integrated courtroom.
- prepare a 40-page marketable transcript.
- type at 60 wpm for five minutes with a maximum of five errors.

Scholastic Preparation

Prospective students should be intelligent, disciplined, motivated, computer-literate and possess above-average language skills. They also need to be able to meet deadlines, work well under pressure and concentrate for long periods of time.

Students with little or no computer background should enroll in ITS 080 Computer Fundamentals as a preparatory course before taking other computer courses. Students without adequate keyboarding skills should enroll in ITS 102 Keyboarding/Word Processing.

Entering students must be high school graduates or possess a certificate of general education (GED). Entering students must be able to pass a five-minute typing proficiency test with a minimum of 35 wpm with five or fewer errors.

Graduation Requirements

Clark State's Court Reporting program is approved by the National Court Reporters Association. This association's requirements are established as a minimum standard and are as follows:

- The student shall pass three 5-minute tests with 95% accuracy at each of the following speeds: 225 wpm testimony (two-voice), 200 wpm jury charge and 180 wpm literary.
- The student shall pass at least two 5-minute timed writings in keyboarding at a minimum of 60 gross wpm with a maximum of 5 errors.
- The student shall complete at least 80 verified hours of internship under the supervision of a practicing court reporter using machine shorthand technology.

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

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
CRE 101	Machine Theory	6
CRE 110	Survey of Court Reporting	1
ENG 111	English I	4
ITS 103	Information Technology Basics	3
OAD 105	Business English	4
Winter		
CRE 102	Speed Building I	4
CRE 120	Law & Legal Terminology	3
ENG 112	English II	4
ENG 221	Business Communications	3
OAD 113	Applied Document Production	3
Spring		
CRE 103	Speed Building II	4
CRE 200	Introduction to Testimony	4
CRE 220	Anatomy & Medical Terminology	4
COM 111	Interpersonal Communication	3
– –	Humanities/Social Science Elective	3
Summer		
CRE 202	Testimony II	3
PSY 111	Psychology I	3
Fall		
CRE 203	Testimony III	3
CRE 221	Literary I	3
CRE 231	Jury Charge I	3
CRE 245	Office Management	3
OAD 124	Vocabulary/Reference Use	3
Winter		
CRE 204	Testimony IV	3
CRE 222	Literary II	3
CRE 232	Jury Charge II	3
CRE 241	Computer Assisted Transcription I	3
– –	Humanities/Social Science Elective	3
Spring		
CRE 205	Testimony V	3
CRE 223	Literary III	3
CRE 233	Jury Charge III	3
CRE 242	Computer Assisted Transcription II	4
CRE 280	Courtroom Practice	3
	Total credit hours	105

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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

• identify pertinent physical evidence at a crime scene, be able to package it, preserve it and present it at trial.

• make a presentation before a group of his/her superiors, subordinates or peers and will be able to articulate important information in a professional manner.

• have an understanding of the criminal justice system and how it applies to a job in law enforcement.

• identifyvarious types of photographic evidence and its importance to a crimal case.

• have an array of community agencies available to him and have an understanding of the functions of these agencies.

Prerequisites

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

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	Course Title	Credit Hours
Fall		
CRJ 100	Intro to Criminal Justice	4
CRJ 112	Traffic Management	3
CRJ 116	Systems Approach to Computer Technology	3
PHO 111	Photography I	3
PSY 111	Psychology I	3
Winter		
CRJ 118	Forensic Photography	3
CRJ 120	Juvenile Procedures	3
CRJ 123	Patrol Operations	3
ENG 111	English I	4
MTH 106	Business Mathematics	3
Spring		
CRJ 125	Community Policing	3
COM 111	Interpersonal Communication	3
	or	
COM 121	Effective Speaking	3
ENG 112	English II	4
PHO 121	Color Photography I	3
SOC 110	Sociology	3
Fall		
CRJ 201	Police Administration	3
CRJ 216	Community Relations	3
CRJ 221	Forensic Science I	5
ENG 223	Technical Report Writing	3
PLS 220	Constitutional Law	3
SWK 105	Chemical Dependency I	4
Winter		
CRJ 222	Forensic Science II	4
CRJ 226	Interview/Interrogation	3
CRJ 228	Criminal Investigation	3
CRJ 231	Criminal Law	3
– –	Humanities/Social Science Elective	3
Spring		
CRJ 230	Social Justice	3
CRJ 232	Ohio Criminal Code	3
CRJ 250	Community Resources	3
CRJ 280	Practicum	3
	Total credit hours	97

*Technical electives: See Criminal Justice coordinator for additional information.

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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

Upon completion of an associate degree in Early Childhood Education, a graduate will be able to:

- recognize, identify and explain early childhood theories.
- demonstrate the ability to implement developmentally appropriate activities to enhance the development of the whole child.
- recognize communicable disease in a childcare setting.
- encourage human creativity in young children.
- analyze and appraise developmentally appropriate literature for use in the pre-school classroom.
- demonstrate ability to write lessons plans, resumes and technical communications.
- plan and implement the full day routine and activities of licensed childcare or pre-school programs.

Overview

Students receive a total of 320 clock hours of supervised experiences in approved early childhood education settings during Practicums 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.

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 4.

Course Number	Course Title	Credit Hours
Fall		
ECE 100	Intro to Early Childhood Education	3
ECE 114	Art, Music and the Child	3
ENG 111	English I	4
PSY 111	Psychology I	3
SOC 110	Sociology	3
Winter		
ECE 110	Infant/Toddler Education	3
ECE 112	Resources in Early Childhood Education	4
ENG 112	English II	4
PSY 221	Human Growth and Development I	3
– –	Technical Elective*	2
Spring		
ECE 120	Language Dev and the Child	3
ECE 250	Behavior Management of Children	3
COM 121	Effective Speaking	3
ITS 12W	Beginning Word Processing	1
SOC 240	Racial and Cultural Minorities	3
– –	Technical Elective*	2
Fall		
ECE 211	Sensory Motor Skills Development	3
ECE 213	Health, Safety and Nutrition	3
ECE 215	Math/Science Activities	3
ECE 223	Preschool Curriculum	3
ENG 223	Technical Report Writing	3
Winter		
ECE 217	Special Needs Child	4
ECE 224	School Age Curriculum	3
ECE 271	ECE Practicum I	2
ECE 291	Child Care Seminar I	2
MTH 121	College Algebra I**	3
– –	Technical Elective*	3
Spring		
ECE 225	Professional, Legal, Ethical Issues	2
ECE 230	Organization and Management of Child Care Centers	3
ECE 272	ECE Practicum II	2
ECE 292	Child Care Seminar II	2
– –	Technical Elective*	3
– –	Humanities/Social Science Elective	3
	Total credit hours	94

*Technical electives include: ECE 220, ECE 221, ECE 222, ECE 307 or Special Topics course with program coordinator approval.

**Students may substitute MTH 106 Business Mathematics for MTH 121 Algebra I.

Early Childhood Education Administration

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.

Course Number	Course Title	Credit Hours
Fall		
ECE 100	Intro to Early Childhood Education	3
ECE 114	Art, Music and Child	3
BUS 112	Principles of Business Management	4
ENG 111	English I	4
PSY 111	Psychology I	3
Winter		
ECE 110	Infant/Toddler Education	3
ECE 112	Resources in Early Childhood Education	4
ENG 112	English II	4
PSY 221	Human Growth and Development I	3
– –	Technical Elective*	2
Spring		
ECE 250	Behavior Management of Children	3
BUS 106	Human Relations and Organizational Behavior	4
COM 121	Effective Speaking	3
ITS 12W	Beginning Word Processing	1
OAD 200	Administrative Office Management	3
SOC 110	Sociology	3
Fall		
ECE 213	Health, Safety and Nutrition	3
ECE 223	Preschool Curriculum	3
ACC 111	Principles of Accounting I	4
ENG 223	Technical Report Writing	3
– –	Technical Elective*	2
Winter		
ECE 217	Special Needs Child	4
ECE 224	School Age Curriculum	3
ECE 271	ECE Practicum I	2
ECE 291	Child Care Seminar I	2
– –	Humanities/Social Science Elective	3
Spring		
ECE 225	Professional, Legal, Ethical Issues	2
ECE 230	Organization and Management of Child Care Centers	3
ECE 283	ECE Practicum - Administration	2
ECE 293	Child Care Seminar - Administration	2
SOC 240	Racial and Cultural Minorities	3
– –	Technical Elective*	3
	Total credit hours	94

*Technical electives include: ECE 220, ECE 221, ECE 222 or Special Topics course with program coordinator approval.

Early Childhood Education Departmental Certificates

Two departmental certificates are available for students interested in gaining specialized knowledge in literacy or early childhood administration. The Early Literacy Development Certificate is intended to expand the core knowledge of inservice teachers. The Early Childhood Administration Certificate enables students to meet the state minimum requirements for a director of a licensed child care center. Instructor permission is required for both certificates. These certificates can be applied for by filling out the certificate application form in the Public Services Office in the Applied Science Center.

Early Literacy Development Departmental Certificate

Course Number	*Course Title*	*Credit Hours*
ECE 120	Language and the Developing Child	3
ECE 210	Children's Literature	3
ECE 220	Early Literacy Development - Session A	3
ECE 221	Early Literacy Development - Session B	3
ECE 222	Early Literacy Development - Session C	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 Childhood Administration Departmental Certificate

Course Number	*Course Title*	*Credit Hours*
ECE 100	Intro to Early Childhood Education	3
ECE 213	Health, Safety and Nutrition	3
ECE 217	Special Needs Child	4
ECE 225	Professional, Legal, Ethical Issues	2
ECE 230	Organization and Management of Child Care Centers	3
– –	ECE 110, ECE 223 *or* ECE 224	3
	Total credit hours	18

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 developmental recommendations. Many individuals, especially part-time students and those taking developmental courses, will require additional quarters of study. Students should consult their EMS advisors for help in planning their schedules.

Program Goals

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

- have 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, a one year certificate program and several certification programs including EMT-Intermediate and Paramedic. 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 competency 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
- A 75% on paramedic admission test
- Physical exam and health requirements

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Summer		
BIO 102	Medical Terminology	3
BIO 105	Intro to Anatomy and Physiology	4
Fall		
EMS 101	Paramedic Theory/Practice I	7
EMS 112	Hospital Practice I	1
ENG 111	English I	4
ITS –	Computer Modules	3
Winter		
EMS 102	Paramedic Theory/Practice II	7
EMS 114	Hospital Practice II	2
EMS 120	ALS Field Observation I	1
ENG 112	English II	4
PSY 111	Psychology I	3
Spring		
EMS 105	Paramedic Theory/Practice III	6
EMS 116	Hospital Practice III	2
EMS 122	ALS Field Observation II	1
COM 111	Interpersonal Communication	3
– –	Humanities/Social Science Elective	3
Fall		
EMS 230	EMS Supervision	3
PHL 210	Ethics	3
– –	Humanities/Social Science Elective	3
– –	Technical Elective*	3
Winter		
EMS 220	EMS Pharmacology	3
EMS 240	Hazardous Material/Disaster Management	3
EMS 280	Advanced Rescue	4
PSY 221	Human Growth and Development I	3
Spring		
EMS 225	Advanced Patient Assessment	4
EMS 250	EMS Legal Insights	2
ENG 223	Technical Report Writing	3
– –	Humanities/Social Science Elective	3
	Total credit hours	91

*Technical electives include: EXS 201, MST 101, MST 121, SWK 105, SWK 220.

Emergency Medical Services/ Paramedic Certificate

Certificate programs typically require one year of full-time study or two years of part-time study. This will provide the development of skills in a limited, specialized area. Courses are applicable to the associate degree program.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Course Number	Course Title	Credit Hours
Summer		
BIO 102	Medical Terminology	3
BIO 105	Intro to Anatomy and Physiology	4
Fall		
EMS 101	Paramedic Theory/Practice I	7
EMS 112	Hospital Practice I	1
ENG 111	English I	4
ITS –	Computer Modules	3
Winter		
EMS 102	Paramedic Theory/Practice II	7
EMS 114	Hospital Practice II	2
EMS 120	ALS Field Observation I	1
ENG 112	English II	4
PSY 111	Psychology I	3
Spring		
EMS 105	Paramedic Theory/Practice III	6
EMS 116	Hospital Practice III	2
EMS 122	ALS Field Observation II	1
COM 111	Interpersonal Communication	3
– –	Humanities/Social Science Elective	3
	Total credit hours	54

EMT-Intermediate Certification Program

This program builds on the existing knowledge and skill of the EMT-Basic in eight distinct areas: roles and responsibilities of the advanced level provider, prehospital environment, preparatory skills including advanced patient assessment, medical communications, advanced airway management, defibrillation, epinephrine administration and shock management with intravenous fluid therapy. This course of study is included in the Paramedic Certification Program.

Course Number	Course Title	Credit Hours
Summer		
BIO 102	Medical Terminology	3
BIO 105	Intro to Anatomy and Physiology	4
Fall		
EMS 101	Paramedic Theory/Practice I	7
EMS 112	Hospital Practice I	1
	Total credit hours	15

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 prehospital 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.

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
- A 75% on paramedic admission test
- Physical exam and health requirements
- Successfully complete BIO 102, BIO 105

Course Number	*Course Title*	*Credit Hours*
Summer		
BIO 102	Medical Terminology	3
BIO 105	Intro to Anatomy and Physiology	4
Fall		
EMS101	Paramedic Theory/Practice I	7
EMS112	Hospital Practice I	1
Winter		
EMS 102	Paramedic Theory/Practice II	7
EMS 114	Hospital Practice II	2
EMS 120	ALS Field Observation I	1
Spring		
EMS 105	Paramedic Theory/Practice III	6
EMS 116	Hospital Practice III	2
EMS 122	ALS Field Observation II	1
	Total credit hours	34

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 or PHTLS or BTLS
- Three letters of recommendation
- A 75% on paramedic admission test
- Physical exam and health requirements
- Proof of licensure for RN, nurse practitioner or physician's assistant

Liability Insurance

Students will be billed for liability insurance.

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

Exercise Science

The Exercise Science Technology program is designed to acquaint students with the concepts of lifelong fitness and health promotion. Graduates will be prepared to serve as fitness resource persons in the community. They will be able to provide organizational and administrative skills in sports and fitness centers and instruction in fitness activities and health enhancement.

The Clark State Wellness Center on the Leffel Lane Campus will serve as the laboratory for the introductory courses. In the second year, students will identify their interests for the two practicum experiences and will utilize the fitness facilities and/or cardiac rehabilitation facilities in the community.

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

Program Goals

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

- have the knowledge and skills to design, organize and lead a fitness program.
- be prepared to handle health emergencies within legal limits.
- demonstrate competency and understanding of human motion and fitness principles.
- learn the concepts and factors that pertain to managing fitness facilities and equipment.
- evaluate clients and prescribe exercises.

Scholastic Preparation

The program serves any student who has a high school diploma or a GED and has successfully completed the placement tests or required developmental courses. The prerequisite courses are high school chemistry or CHM 012 or CHM 110 with a C or better, high school biology or BIO 105 with a C or better and high school algebra or DEV 101 with a C or better.

Health Requirements

A health history, a physical examination and a two-step Mantoux test are required prior to the beginning of the practicum courses. Accepted students will need to obtain a professional CPR certification prior to enrolling in the second year of technical courses.

Graduation Requirements

To qualify for an associate degree in applied science, students must pass all the required courses, have a C as a minimum grade in all the BIO and EXS courses and have a cumulative average of 2.0. Students must take a national certification exam.

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 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
EXS 110	Intro to Physical Fitness	3
BIO 102	Medical Terminology	3
BIO 121	Anatomy and Physiology I	4
ENG 111	English I	4
PSY 111	Psychology I	3
Winter		
EXS 114	Health and Health Emergencies	3
EXS 116	Care of Athletic Injuries	3
EXS 201	EKG Skills	2
BIO 122	Anatomy and Physiology II	4
BUS 250	Leadership in Organizations	4
ENG 112	English II	4
Spring		
EXS 117	Weight Training Methods	2
EXS 119	Math for Fitness Professionals	2
EXS 123	Aerobic Fitness Methods	2
BIO 123	Anatomy and Physiology III	4
BIO 210	Exercise Physiology	4
COM 111	Interpersonal Communication	3
Fall		
EXS 210	Nutrition and Sport	3
EXS 212	Intro to Exercise Testing and Prescription	4
EXS 215	Fitness for Special Populations	2
EXS 240	Fitness Instruction	3
BIO 118	Muscle Anatomy	2
ITS 103	Information Technology Basics	3
Winter		
EXS 218	Management of Facilities and Programs	3
EXS 220	Fitness Issues: Professional and Legal	3
EXS 225	Biomechanics of Exercise	4
EXS 281	Practicum I	2
EXS 291	Seminar I	1
– –	Humanities/Social Science Elective	3
Spring		
EXS 233	Aquatics Management/Court Sports	2
EXS 282	Practicum II	2
EXS 292	Seminar II	1
BUS 243	Principles of Marketing	4
ENG 223	Technical Report Writing	3
– –	Humanities/Social Science Elective	3
	Total credit hours	102

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 developmental recommendations. Many individuals, especially part-time students and those taking developmental courses, will require additional quarters of study. Students should consult their academic advisor for help in planning their schedules.

Program Goals

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

- utilize Quark Xpress 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 their ideas, concepts and design knowledge.
- design effectively with type.
- appear organized and professional in appearance.
- write and design a professional resume and portfolio.
- manage a design problem from conceptualization to a finished layout.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
GPH 100	Introduction to Graphic Design	4
GPH 105	Design Fundamentals	3
ART 111	Drawing I	3
BUS 105	Introduction to Business	3
ENG 111	English I	4
Winter		
GPH 110	Digital Illustration	3
GPH 112	Digital Typography I	3
ART 112	Drawing II	3
ENG 112	English II	4
SOC 220	Comparing Cultures	3
Spring		
GPH 114	Digital Typography II	3
GPH 201	Electronic Imagery I	3
ART 113	Drawing III	3
ART 135	Art History III	3
ENG 223	Technical Report Writing	3
Fall		
GPH 120	Logo, Symbol, Corporate ID	3
GPH 202	Electronic Imagery II	3
GPH 211	Computer Layout I	3
ART 130	Appreciation of the Arts	3
PHL 220	Business Ethics	3
Winter		
GPH 203	Electronic Imagery III	3
GPH 212	Computer Layout II	3
GPH 250	Professional Development	5
BUS 140	Introduction to Electronic Business	3
Spring		
GPH 205	Advertising Layout	3
GPH 220	Illustration Techniques	3
GPH 230	Introduction to Web Design	3
GPH 285	Graphic Design Internship	3
BUS 106	Human Relations and Organizational Behavior	4
	Total credit hours	93

Note: It is extremely important that students save all artwork from the first quarter forward to enable them to build a portfolio in GPH 250.

Horticultural Industries

The Horticultural Industries program provides basic preparations 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, landscaping and nursery operation or turf and landscape maintenance.

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

Program Goals

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 matierals.
- demonstrate the proper care of established plants in the landscape.

Scholastic Preparation

Basic high school math, English, chemistry, biology and keyboarding skills are strongly recommended. If these requirements are not met, preparatory courses will need to be taken at Clark State.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Golf Course Maintenance Option

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

Course Number	Course Title	Credit Hours
Fall		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 133	Turf Science	3
AGR 150	Soil Science	4
ENG 111	English I	4
ENT 121	Computer Basics in Applied Technology	3
Winter		
AGR 151	Soil Fertility	4
BIO 140	Plant Science	4
COM 121	Effective Speaking	3
ENG 112	English II	4
MTH 106	Business Mathematics	3
Spring		
AGR 193	Horticulture Co-op Experience I	3
AGR 225	Landscape Maintenance	4
Summer		
AGR 293	Horticulture Co-op Experience II	3
– –	Humanities/Social Science Elective	3
Fall		
AGR 122	Plant Pests	4
AGR 143	Landscape Plant Materials	4
AGR 174	Agribusiness Principles	3
AGR –	Ag/Hort Elective*	3
ACC 111	Accounting I	4
Winter		
AGR 226	Landscape Design	4
AGR 253	Pest Management	5
AGR –	Ag/Hort Elective*	3
ENG 223	Technical Report Writing	3
– –	Humanities/Social Science Elective	3
Spring		
AGR 145	Herbaceous Plant Materials	4
AGR 284	Agribusiness Management	4
CET 203	Construction Methods	4
– –	Social Science Elective	3
	Total credit hours	99

*Ag/Hort electives may be any AGR course not required in the program. Other coursework may be approved by the division.

Landscaping and Nursery Operations Option

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

Course Number	Course Title	Credit Hours
Fall		
AGR 104	Agricultural Survey and Employment Skills	3
AGR 143	Landscape Plant Materials	4
AGR 150	Soil Science	4
ENG 111	English I	4
ENT 121	Computer Basics in Applied Technology	3
Winter		
AGR 151	Soil Fertility	4
AGR 226	Landscape Design	4
BIO 140	Plant Science	4
ENG 112	English II	4
MTH 106	Business Mathematics	3
Spring		
AGR 145	Herbaceous Plant Materials	4
AGR 193	Horticulture Co-op Experience I	3
Summer		
AGR 293	Horticulture Co-op Experience II	3
– –	Humanities/Social Science Elective	3
Fall		
AGR 122	Plant Pests	4
AGR 174	Agribusiness Principles	3
ACC 111	Accounting I	4
COM 121	Effective Speaking	3
– –	Social Science Elective	3
Winter		
AGR 105	Principles of Ag Sales I	3
AGR 231	Plant Propagation	4
AGR 253	Pest Management	5
AGR –	Ag/Hort Elective*	3
ENG 223	Technical Report Writing	3
Spring		
AGR 225	Landscape Maintenance	4
AGR 284	Agribusiness Management	4
CET 203	Construction Methods	4
– –	Humanities/Social Science Elective	3
	Total credit hours	100

*Ag/Hort electives may be any AGR course not required in the program. Other coursework may be approved by the division.

Turf and Landscape Maintenance 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	Turf Science	3
AGR 150	Soil Science	4
ENG 111	English I	4
ENT 121	Computer Basics in Applied Technology	3
Winter		
AGR 151	Soil Fertility	4
BIO 140	Plant Science	4
COM 121	Effective Speaking	3
ENG 112	English II	4
MTH 106	Business Mathematics	3
Spring		
AGR 193	Horticulture Co-op Experience I	3
AGR 225	Landscape Maintenance	4
Summer		
AGR 293	Horticulture Co-op Experience II	3
– –	Humanities/Social Science Elective	3
Fall		
AGR 122	Plant Pests	4
AGR 143	Landscape Plant Materials	4
AGR 174	Agribusiness Principles	3
AGR –	Ag/Hort Elective*	3
ACC 111	Accounting I	4
Winter		
AGR 105	Principles of Ag Sales I	3
AGR 226	Landscape Design	4
AGR 253	Pest Management	5
ENG 223	Technical Report Writing	3
– –	Social Science Elective	3
Spring		
AGR 145	Herbaceous Plant Materials	4
AGR 284	Agribusiness Management	4
CET 203	Construction Methods	4
– –	Humanities/Social Science Elective	3
	Total credit hours	99

*Ag/Hort electives may be any AGR course not required in the program. Other coursework may be approved by the division.

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 electrician, machine repair technician or maintenance technician.

Technical coursework in the program is designed such that it can be used to support company-sponsored apprenticeship programs.

Program Goals

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 operation and programming automated systems.
- apply computers in troubleshooting, maintenance planning and report writing using application software.

Directed Learning Laboratory

Clark State Community College has recognized the need for students who are currently working to have flexible class hours. As a result, many of the courses in the Industrial Technology program will be offered in the College's Directed Learning Laboratory. Most Industrial Technology (INT) courses, along with selected other 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 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.

Scholastic Preparation

Students should have had one year of high school algebra 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. The format of classes in the Directed Learning Laboratory is primarily self-directed with support provided by a faculty member. The ability to learn on an independent basis will help ensure student success in this program.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Electrical Maintenance

The associate of applied science degree in Electrical Maintenance Technology provides a broad base in the maintenance of electrical, mechanical and fluid power systems. Further specialized coursework in electrical power, controls and automation prepares the student for an entry-level position as a maintenance technician.

Course Number	*Course Title*	*Credit Hours*
Fall		
INT 120	Fluid Power I	4
DFT 101	Drafting I	3
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
QET 101	Metrology I	2
Winter		
INT 115	Industrial Calculations	3
INT 125	Fluid Power II	4
INT 150	Electrical Systems	4
DFT 211	Computer-Aided Design I	4
ENG 112	English II	4
Spring		
INT 140	Industrial Safety	3
INT 155	Motors and Motor Controls	4
INT 170	Mechanical Maintenance	4
COM 121	Effective Speaking	3
EBE 100	Employability Skills	2
Summer		
EBE 284	Co-op Education I	4
Fall		
INT 250	Programmable Logic Controllers	3
EBE 294	Co-op Education II	4
PSY 111	Psychology*	3
Winter		
INT 255	Electrical Troubleshooting	4
INT 260	Electrical Distribution	4
ENG 223	Technical Report Writing	3
NTK 172	PC Maintenance I	5
SOC 110	Sociology*	3
Spring		
INT 252	Automated Systems	4
INT 270	Industrial Machine Maintenance	4
INT 280	Industrial Technology Projects	4
ECO 110	General Economics*	3
– –	Humanities/Social Science Elective	3
	Total credit hours	102

*Other humanities/social science electives may be substituted.

Industrial Technology - 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 120	Fluid Power I	4
DFT 101	Drafting I	3
ENG 111	English I	4
ENT 121	Computer Basics for Applied Technology	3
QET101	Metrology I	2
Winter		
INT 115	Industrial Calculations	3
INT 125	Fluid Power II	4
INT 150	Electrical Systems	4
INT 170	Mechanical Maintenance	4
EBE 100	Employability Skills	2
Spring		
INT 155	Motors and Motor Controls	4
INT 250	Programmable Logic Controllers	3
COM 121	Effective Speaking	3
EBE 284	Co-op Education I	4
	Total credit hours	47

Information Technology Systems

Information technology is one of the fastest-growing career fields today.

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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

- analyze business requirements.
- initiate, design and develop an information system.
- code and develop structural/procedural, object-oriented and scripting programming routines.
- develop data models.
- develop process models.
- create objects and components.
- develop prototypes.
- perform software testing, validation and evaluation.
- develop database programs.
- demonstrate knowledge of software development methodology via Systems Development Life Cycle (SDLC) usage.
- demonstrate knowledge of Database Management (DBMS) basics.

Scholastic Preparation

Computer Software Development students need a high school algebra background equivalent to DEV 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 4.

Computer Software Development

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.

Course Number	*Course Title*	*Credit Hours*
Fall		
ITS 12A	Windows Concepts	2
ITS 12H	Beginning HTML	2
BUS 105	Introduction to Business	3
COM 111	Interpersonal Communication	3
CSD 105	Programming Fundamentals	4
ENG 111	English I	4
Winter		
ITS 12D	Beginning Database	1
CSD 111	Visual Basic - Fundamentals	5
CSD 150	Database Administration	5
PHL 200	Practical Logic	3
– –	CSD, ITS, NTK Elective *or* EBE 100*	2
Spring		
CSD 112	Visual Basic - Desktop	5
CSD 145	UNIX Concepts	4
CSD 160	Database Design	5
ENG 112	English II	4
Fall		
CSD 113	Visual Basic - Distributed	5
CSD 220	Systems Analysis	4
ENG 221	Business Communications	3
– –	CSD, ITS, NTK Elective *or* Co-op Experience*	4
Winter		
COM 121	Effective Speaking	3
CSD 222	Systems Design	4
CSD 224	Java Concepts I	4
– –	CSD, ITS, NTK Elective *or* Co-op Experience*	4
Spring		
BUS 106	Human Relations and Organizational Behavior	4
BUS 250	Leadership in Organizations	4
CSD 225	Java Concepts II	4
CSD 290	Advanced Topics in Computer Software Development	3
– –	Social Science Elective	3
	Total credit hours	101

*ITS 080 cannot be used as an elective.

Information Technology Systems

Information technology is one of the fastest-growing career fields today.

Web 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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

- demonstrate knowledge of web page basics by developing and publishing a web page.
- demonstrate knowledge of Internet programming basics given specific programming scenarios.
- demonstrate knowledge of interactive sub-routines into web page/HTML code.
- develop a Data Model.
- develop data driven web pages, which include sorting and filtering.
- develop an e-commerce site.

Scholastic Preparation

Web Development students need a high school algebra background equivalent to DEV 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 4.

Web Development Option

The Web Development curriculum prepares the students to develop web sites for both personal and business use. An option off the Computer Software Development curriculum, Web Development retains the analysis and design and database management features of that curriculum. Students are prepared to create and manage web sites that connect not only to the World Wide Web but also to an organization's internal network and database system thus allowing for electronic commerce activities.

Course Number	*Course Title*	*Credit Hours*
Fall		
ITS 12A	Windows Concepts	2
ITS 12H	Beginning HTML	2
BUS 105	Introduction to Business	3
COM 111	Interpersonal Communications	3
CSD 105	Programming Fundamentals	4
ENG 111	English I	4
Winter		
ITS 12D	Beginning Database	1
CSD 150	Database Administration	5
ENG 112	English II	4
NTK 152	Internet Technologies	5
PHL 200	Practical Logic	3
Spring		
ITS 12P	Beginning Presentation Graphics	1
CSD 145	UNIX Concepts	4
CSD 160	Database Design	5
ENG 221	Business Communications	3
– –	CSD, ITS, NTK Elective *or* EBE 100*	2
Fall		
ITS 14P	Intermediate Presentation Graphics	2
COM 121	Effective Speaking	3
CSD 220	Systems Analysis	4
CSD 231	Web Development I	4
– –	CSD, ITS, NTK Elective *or* Co-op Experience*	4
Winter		
ACC 111	Principles of Accounting	4
CSD 222	Systems Design	4
CSD 232	Web Development II	4
– –	CSD, ITS, NTK Elective *or* Co-op Experience*	4
Spring		
BUS 106	Human Relations and Organizational Behavior	4
BUS 250	Leadership in Organizations	4
CSD 233	Web Development III	4
CSD 290	Advanced Topics in Computer Software Development	3
– –	Social Science Elective	3
	Total credit hours	102

*ITS 080 cannot be used as an elective.

Information Technology 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 Technologies Division 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. Program languages will include both procedural and object-oriented.

Course Number	Course Title	Credit Hours
ITS 12A	Windows Concepts	2
CSD 105	Programming Fundamentals	4
CSD 111	Visual Basic - Fundamentals	5
CSD 112	Visual Basic - Desktop	5
CSD 113	Visual Basic - Distributed	5
CSD 224	Java Concepts I	4
CSD 225	Java Concepts II	4
CSD 262	Introduction to Object-Oriented COBOL	4
	Total credit hours	33

Database Administration and Design Certificate

The focus of this certificate is to provide the knowledge and skills necessary to administer and develop database applications. Both PC and back-end servers will be included.

Course Number	Course Title	Credit Hours
ITS 12A	Windows Concepts	2
ITS 12D	Beginning Database	1
ITS 14D	Intermediate Database	2
CSD 105	Programming Fundamentals	4
CSD 111	Visual Basic - Fundamentals	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
CSD 220	Systems Analysis	4
CSD 222	Systems Design	4
	Total credit hours	32

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 Number	Course Title	Credit Hours
ITS 12A	Windows Concepts	2
ITS 12D	Beginning Database	1
CSD 105	Programming Fundamentals	4
CSD 111	Visual Basic - Fundamentals	5
CSD 150	Database Administration	5
CSD 160	Database Design	5
CSD 220	Systems Analysis	4
CSD 222	Systems Design	4
CSD 290	Advanced Topics in Computer Software Development	3
	Total credit hours	33

Web Development 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.

Course Number	Course Title	Credit Hours
ITS 12A	Windows Concepts	2
ITS 12D	Beginning Database	1
ITS 12H	Beginning HTML	2
ITS 12P	Beginning Presentation Graphics	1
CSD 105	Programming Fundamentals	4
CSD 150	Database Administration	5
CSD 160	Database Design	5
CSD 231	Web Design I	4
CSD 232	Web Design II	4
CSD 233	Web Design III	4
	Total credit hours	32

Object-Oriented Programming Certificate

This certificate focuses on providing the knowledge and skills necessary to design and develop object-oriented applications which include objects, components or complete systems.

Course Number	Course Title	Credit Hours
CSD 105	Programming Fundamentals	4
CSD 106	Introduction to Scripting Languages	4
CSD 111	Visual Basic - Fundamentals	5
CSD 220	Systems Analysis	4
CSD 222	Systems Design	4
CSD 224	Java Concepts I	4
CSD 225	Java Concepts II	4
CSD 262	Introduction to Object-Oriented COBOL	4
	Total credit hours	33

Information Technology Systems

Information technology is one of the fastest-growing career fields today.

Network Administration 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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

- demonstrate knowledge of PC terms and concepts.
- demonstrate the ability to troubleshoot basic desktop hardware and operating system problems.
- demonstrate the ability to install, configure, and manage Internet services.
- demonstrate the ability to configure and troubleshoot basic server technologies.
- demonstrate proficiency in installing, managing and configuring network operating systems.
- demonstrate knowledge of basic LAN/WAN technologies.
- demonstrate proficiency in implementing intermediate LAN/WAN technologies and hardware components.

Scholastic Preparation

Network Administration students should have completed high school algebra or DEV 101 Introduction to Algebra by the completion for their first year. 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 4.

Network Administration

The Network Administration curriculum prepares students to plan, design, implement, troubleshoot and administer microcomputer-based networks. Students learn how to maintain microcomputer systems, administer network server resources/services and design and implement the network infrastructure. This curriculum focuses on assisting students in preparing for the following certification: CompTIA (A+, Server+, Network+, i-Net+), Novell (Certified NetWare Administrator), Microsoft (Microsoft Certified Professional) and Cisco (Certified Network Associate).

Course Number	*Course Title*	*Credit Hours*
Fall		
ACC 111	Principles of Accounting I	4
BUS 105	Introduction to Business	3
ENG 111	English I	4
NTK 172	PC Maintenance I	5
Winter		
BUS 106	Human Relations and Organizational Behavior	4
ENG 112	English II	4
NTK 152	Internet Technologies	5
NTK 174	PC Maintenance II	5
Spring		
BUS 250	Leadership in Organizations	4
ENG 221	Business Communications	3
NTK 154	Server Install and Configuration	5
– –	CSD, EBE, ITS *or* NTK Elective*	5
Fall		
NTK 100	Cisco Associate I	5
NTK 260	Windows 2000 Professional	5
PHL 220	Business Ethics	3
– –	CSD, EBE *or* NTK Elective*	5
Winter		
COM 121	Effective Speaking	3
NTK 102	Cisco Associate II	5
NTK 262	Windows 2000 Server	5
– –	CSD, EBE *or* NTK Elective*	5
Spring		
COM 111	Interpersonal Communication	3
NTK 104	Cisco Associate III	5
NTK 250	Novell Netware Administration	5
– –	Social Science Elective	3
	Total credit hours	103

*EBE 110 and ITS 080 cannot be used as electives.

Information Technology Systems

Information technology is one of the fastest-growing career fields today.

Office Systems Software 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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

Upon completion of an associate degree in Office Systems Software, a graduate will be able to:

- demonstrate knowledge of PC terms and concepts.
- demonstrate the ability to troubleshoot basic desktop hardware and operating system problems.
- demonstrate the ability to install, configure and manage Internet services.
- demonstrate proficiency in installing, managing and configuring network operating systems.
- demonstrate the ability to appropriately use and support desktop operating systems and applications.

Scholastic Preparation

Office Systems Software students should have completed high school algebra or DEV 101 Introduction to Algebra by the completion of their first year.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 4.

Office Systems Software Option

The Office Systems Software curriculum prepares students to support Microsoft operating system and application software. Students learn how to maintain microcomputer systems, install and configure network resources/services and support desktop operating systems and application software. This curriculum focuses on assisting students in preparing for the following certifications: CompTIA (A+, Server+, Network+, i-Net+), Novell (Certified NetWare Administrator), Microsoft (Microsoft Certified Professional and Microsoft Office User Specialist).

Course Number	Course Title	Credit Hours
Fall		
ITS 12A	Windows Concepts	2
ITS 12P	Beginning Presentation Graphics	1
ITS 12W	Beginning Word Processing	1
BUS 105	Introduction to Business	3
ENG 111	English I	4
NTK 172	PC Maintenance I	5
Winter		
ITS 14A	Intermediate Windows Concepts	2
ITS 14P	Intermediate Presentation Graphics	2
BUS 106	Human Relations and Organizational Behavior	4
NTK 152	Internet Technologies	5
NTK 174	PC Maintenance II	5
Spring		
ITS 12D	Beginning Database	1
ITS 12S	Beginning Spreadsheet	1
ITS 14W	Intermediate Word Processing	2
ENG 112	English II	4
NTK 154	Server Install and Configuration	5
– –	CSD, EBE, ITS *or* NTK Elective*	5
Fall		
ITS 14S	Intermediate Spreadsheet	2
ENG 221	Business Communications	3
NTK 260	Windows 2000 Professional	5
PHL 220	Business Ethics	3
– –	CSD, EBE *or* NTK Elective*	5
Winter		
ACC 111	Principles of Accounting I	4
COM 121	Effective Speaking	3
NTK 262	Windows 2000 Server	5
– –	CSD, EBE *or* NTK Elective*	5
Spring		
ITS 14D	Intermediate Database	2
BUS 250	Leadership in Organizations	4
COM 111	Interpersonal Communication	3
NTK 250	Novell Netware Administration	5
– –	Social Science Elective	3
	Total credit hours	104

*EBE 110 and ITS 080 cannot be used as electives.

Information Technology Systems

Information technology is one of the fastest-growing career fields today.

Technical 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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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

- demonstrate knowledge of PC terms and concepts.
- demonstrate the ability to troubleshoot basic desktop hardware and operating system problems.
- demonstrate the ability to install, configure and manage Internet services.
- demonstrate the ability to configure and troubleshoot basic server technologies.
- demonstrate proficiency in installing, managing and configuring network operating systems.
- demonstrate the ability to structure, manage and maintain technical support systems.
- demonstrate proficiency in implementing basic network security technologies and tools.

Scholastic Preparation

Technical Support students need a high school algebra background equivalent to DEV 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 4.

Technical Support Option

The Technical Support curriculum prepares students to support computer and network end-users and setup technical support structures. Students learn how to maintain microcomputer systems, administer network server resources/services, implement and maintain technical support systems and setup information security structures. This curriculum focuses on assisting students in preparing for the following certifications: CompTIA (A+, Server+, Network+, i-Net+, Linux+), Novell (Certified NetWare Administrator), Microsoft (Microsoft Certified Professional) and the Information Security Professional (CISSP).

Course Number	*Course Title*	*Credit Hours*
Fall		
ACC 111	Principles of Accounting I	4
BUS 105	Introduction to Business	3
ENG 111	English I	4
NTK 172	PC Maintenance I	5
Winter		
BUS 106	Human Relations and Organizational Behavior	4
ENG 112	English II	4
NTK 152	Internet Technologies	5
NTK 174	PC Maintenance II	5
Spring		
BUS 250	Leadership in Organizations	4
ENG 221	Business Communications	3
NTK 154	Server Install and Configuration	5
– –	CSD, ITS, NTK Elective *or* EBE Elective	5
Fall		
NTK 240	Unix/Linux Administration I	5
NTK 260	Windows 2000 Professional	5
PHL 220	Business Ethics	3
– –	CSD, NTK Elective *or* EBE Elective	5
Winter		
COM 121	Effective Speaking	3
NTK 120	Information Security I	5
NTK 262	Windows 2000 Server	5
– –	CSD, NTK Elective *or* EBE Elective	5
Spring		
COM 111	Interpersonal Communications	3
NTK 130	Technical Support Systems	5
NTK 250	Novell NetWare Administration	5
– –	Social Science Elective	3
	Total credit hours	103

*EBE 110 and ITS 080 cannot be used as electives.

Information Technology 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 Technologies Division 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 152	Internet Technologies	5
NTK 154	Server Install and Configuration	5
NTK 172	PC Maintenance I	5
NTK 174	PC Maintenance II	5
NTK 250	Novell NetWare Administration	5
NTK 260	Windows 2000 Professional	5
NTK 262	Windows 2000 Server	5
	Total credit hours	35

Network Design 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 100	Cisco Associate I	5
NTK 102	Cisco Associate Ii	5
NTK 104	Cisco Associate III	5
NTK 152	Internet Technologies	5
NTK 154	Server Install and Configuration	5
NTK 172	PC Maintenance I	5
NTK 174	PC Maintenance II	5
	Total credit hours	35

Microsoft Network Certificate

This certificate is focused on providing the knowledge and skills necessary to plan, install, configure and administer a Microsoft Windows 2000 network.

Course Number	Course Title	Credit Hours
NTK 260	Windows 2000 Professional*	5
NTK 262	Windows 2000 Server	5
NTK 264	Administering Windows 2000 Infrastructure	5
NTK 265	Designing Windows 2000 Infrastructure	5
NTK 266	Administering Windows 2000 Directory Service	5
NTK 267	Designing Windows 2000 Directory Services	5
NTK 268	Designing Windows 2000 Security	5
	Total credit hours	35

*Students who do not have a background equivalent to ITS 172 PC Maintenance I will need to take that course prior to enrolling in NTK 260.

Technical Support Certificate

This certificate is focused on providing the knowledge and skills necessary to support computer and network end-users and setup technical support structures.

Course Number	Course Title	Credit Hours
NTK 130	Technical Support Systems	5
NTK 152	Internet Technologies	5
NTK 154	Server Install and Configuration	5
NTK 172	PC Maintenance I	5
NTK 174	PC Maintenance II	5
NTK 240	Unix/Linux Administration I	5
NTK 260	Windows 2000 Professional	5
	Total credit hours	35

Office Systems Software Certificate

This certificate is focused on providing the knowledge and skills necessary to support office personnel in the use of microcomputer hardware and Mincrosoft operating system and office productivity software.

Course Number	Course Title	Credit Hours
ITS 12A	Windows Concepts	2
ITS 12D	Beginning Database	1
ITS 12H	Beginning HTML Concepts	2
ITS 12P	Beginning Presentation Graphics	1
ITS 12S	Beginning Spreadsheet	1
ITS 12W	Beginning Word Processing	1
ITS 14A	Intermediate Windows Concepts	2
ITS 14D	Intermediate Database	2
ITS 14P	Intermediate Presentation Graphics	2
ITS 14S	Intermediate Spreadsheet	2
ITS 14W	Intermediate Word Processing	2
NTK 172	PC Maintenance I	5
NTK 174	PC Maintenance II	5
NTK 260	Windows 2000 Professional	5
NTK –	NTK Elective	5
	Total credit hours	38

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 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 Communication	3
ECO 221	Principles of Macroeconomics	3
ENG 111	English I	4
ENG 112	English II	4
ENG 227	Intermediate Composition	3
MTH 106	Business Mathematics	3
	or	
MTH 121	College Algebra I	3
PLS 110	American National Government	3
PSY 111	Psychology I	3
	or	
SOC 110	Sociology	3
One of the following 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 following career-related electives:		
ACC 113	Principles of Accounting III	4
ACC 221	Tax Accounting I	4
CRE 220	Anatomy and Medical Terminology	3
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	39-41

Manufacturing Certificate

The Manufacturing Certificate is designed for students who wish to enhance their skills in areas related to manufacturing. Courses in drafting, computer-aided design, programmable logic controllers and automated systems 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 be better scheduled to fit the student's schedule.

Scholastic Preparation

The time required for a student to complete the certificate will depend on their level of participation. They should have high school drafting, algebra, trigonometry and physics or its equivalent. 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*
Fall		
DFT 102	Drafting II	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
MTH 101	Technical Math Applications A	1
QET 101	Metrology I	2
Winter		
MAT 110	Manufacturing Processes	3
MAT 111	Manufacturing Processes Lab	2
DFT 211	Computer-Aided Design I	4
ENG 112	English II	4
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
Spring		
ENT 205	Circuits and Machines	4
INT 250	Programmable Logic Controllers	3
INT 252	Automated Systems	4
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3
PHY 111	Technical Physics I	4
	Total credit hours	52

Manufacturing Engineering Technology

The Manufacturing 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.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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.

Scholastic Preparation

This program is designed primarily for those students who have completed the high school portion of the Clark State Tech Prep Manufacturing program. Other students may complete this degree but are required to complete additional prerequisite courses not listed in the degree program. Tech Prep students who have not completed all of the high school level competencies may also be required to complete prerequisite coursework. Those prerequisites include DFT 101, DFT 211, MAT 111, MTH 101, PHY 110 and QET 101.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
DFT 102	Drafting II	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
MTH 101	Technical Math Applications A	1
QET 101	Metrology I	2
Winter		
MAT 110	Manufacturing Processes	3
MAT 111	Manufacturing Processes Lab	2
DFT 211	Computer-Aided Design	4
ENG 112	English II	4
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
Spring		
DFT 212	Computer-Aided Design II	4
EBE 100	Employability Skills	2
ENT 111	Engineering Materials	3
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3
PHY 111	Technical Physics I	4
Summer		
EBE 284	Co-op Education I	4
ENT 205	Circuits and Machines	4
ENT 210	Engineering Statistics	3
Fall		
COM 121	Effective Speaking	3
ENG 223	Technical Report Writing	3
INT 250	Programmable Logic Controllers	3
MET 211	Statics	3
QET 215	Statistical Process Control	3
Winter		
MAT 221	Computer Numerical Control	4
INT 252	Automated Systems	4
MET 213	Strength of Materials	4
PSY 111	Psychology*	3
SOC 110	Sociology*	3
Spring		
EBE 287	Co-op Education II	4
ECO 110	Economics*	3
– –	Technical Elective**	3
	Total credit hours	104

*Other humanities/social science electives may be substituted.

**Students must select a minimum of three credits of technical elective coursework from the following to complete graduation requirements: DFT 203, DFT 214, DFT 215, INT 252, INT 255, INT 260, INT 280, ITS 172, MAT 112, MAT 222, MET 231, MET 241, MET 251 or MET 261. Other technical coursework may be approved by the division.

Mechanical Engineering Option

The Mechanical Option of the Manufacturing Engineering Technology program is designed to prepare students for entry-level technology occupations related to the mechanical engineering technology. These occupations include a variety of job titles in the areas of product design, drafting, analysis, manufacturing and testing. Skills in the area of creating and interpreting engineering drawings, the practices and procedures of manufacturing and principles of product design are emphasized. Training in the area of computer-aided drafting is also included.

Students wishing to transfer coursework from Clark State to other institutions to earn a bachelor's degree in mechanical engineering technology should contact the transfer institution very early in their program at Clark State.

Most of the first-year courses are offered as both day and evening sections. It is intended that the programs can be completed by taking courses in the evening on a part-time basis. Students may be required to take evening classes to complete the program since day sections may not be offered for some of the second year courses.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

Upon completion of an associate degree in Mechanical Engineering Technology, a graduate will be able to:

- produce a finished product per quality specifications provided by the instructor 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.
- apply computers and programmable scientific calculators in the solution of engineering related problems using existing applications software and a programming language.
- use design charts and computer software to design and/or evaluate a basic fluid circuit.
- use design charts and computer software to design and/or evaluate components in steam power generation, internal combustion or refrigeration systems.
- apply statics, material strengths and properties to design and/or evaluate various mechanical systems such as gears, bearings, transmissions, couplings and springs.
- complete the mathematics and physics coursework necessary to successfully transfer into a related engineering technology bachelor's degree program.

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 Basic Physics.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
DFT 102	Drafting II	3
ENG 111	English I	4
ENT 101	Engineering Methods	3
ENT 121	Computer Basics for Applied Technology	3
MTH 101	Technical Math Applications A	1
QET 101	Metrology I	2
Winter		
DFT 211	Computer-Aided Design I	4
ENG 112	English II	4
MAT 110	Manufacturing Processes	3
MAT 111	Manufacturing Laboratory	2
MTH 107	Technical Math Applications B	1
MTH 121	College Algebra I	3
Spring		
DFT 212	Computer-Aided Design II	4
ENG 223	Technical Report Writing	3
ENT 111	Engineering Materials	3
MTH 108	Technical Math Applications C	1
MTH 140	Trigonometry	3
PHY 111	Technical Physics I	4
Summer		
MTH 122	College Algebra II	3
Fall		
MET 211	Statics	3
ENT 205	Circuits and Machines	4
MTH 221	Calculus I	5
PHY 112	Technical Physics II	4
PSY 111	Psychology I*	3
Winter		
MET 213	Strength of Materials	4
MET 231	Basic Fluid Mechanics	4
COM 121	Effective Speaking	3
MTH 222	Calculus II	5
Spring		
MET 212	Dynamics	3
MET 261	Applied Thermodynamics	4
ECO 110	General Economics*	3
INT 280	Industrial Technology Projects	4
SOC 110	Sociology*	3
	Total credit hours	106

*Other humanities/social science electives may be substituted.
Note: ENT 212 Finite Element Modeling can be substituted as a technical elective with advisor approval.

Medical Laboratory

Medical Laboratory is a career opportunity providing a middle level of responsibility in the laboratory. Two-year associate degree programs with supervised clinical experience in approved laboratories provide the opportunity to enter this challenging, ever-changing career.

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

Program Goals

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

- communicate professionally and accurately by demonstrating the ability to follow written and verbal instructions; the practice of professional conduct in interactions with other health care professionals, administration, patients and public; and the ability to log in specimens, prepare and keep accurate records, prepare and transmit clear and complete reports.
- select and use appropriate, safe and effective tools to solve a variety of problems pertaining to collecting, handling and conducting tests on samples and to perform corrective and preventative maintenance on instruments.
- demonstrate the ability to think critically by assessing proper correlation between the results and predetermined values, by performing quality control activities, by relating laboratory results to common disease process and by drawing and defending reasonable conclusions.
- demonstrate the necessity for life-long learning to update skills and gain new knowledge.
- demonstrate the ability to use technology and scientific principles to adapt to the technologically changing society.
- demonstrate an awareness of cultural diversity as pertaining to both patients and peers.

Scholastic Preparation

All entering students must have completed at least one year of high school algebra and chemistry and achieved an appropriate score on the College's algebra and chemistry placement tests. If these requirements have not been fulfilled, developmental courses (CHM 012 Introductory Chemistry or CHM 013 and DEV 101 Introductory Algebra I) may be substituted.

Certification

Upon completion of the accredited program, graduates are eligible to take national certifying examinations. This program is accredited by the Committee on Allied Health Education and Accreditation and the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Health Requirements

Medical Laboratory Technology students must have physical exams at the end of the Spring Quarter of their first year in order to meet requirements for the directed practice courses. Hepatitis B vaccination is required 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

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
MLT 100	Medical Lab Orientation	3
MLT 115	Phlebotomy	3
BIO 105	Intro to Anatomy and Physiology	4
CHM 119	Chemistry for Technicians	4
ENG 111	English I	4
Winter		
MLT 122	Hematology I	6
BIO 134	Medical Microbiology I	5
ENG 112	English II	4
ITS 103	Information Technology Basics	3
Spring		
MLT 110	Routine Urinalysis	4
CHM 161	Clinical Chemistry	6
COM 111	Interpersonal Communication	3
PSY 111	Psychology I	3
Summer		
MLT 181	Directed Practice I	4
MLT 191	Seminar I	3
ENG 221	Business Communications	3
Fall		
BIO 233	Immunology	4
BIO 235	Medical Microbiology II	6
COM 121	Effective Speaking	3
– –	Humanities/Social Science Elective	3
Winter		
MLT 221	Hematology II	6
MLT 251	Immunohematology	8
MLT 270	MLT Review and Update	4
Spring		
MLT 281	Directed Practice II	4
MLT 291	Seminar II	3
	Total credit hours	103

Multi-Skilled Health Care Certificate

The Multi-Skilled Health Care Certificate program is designed for students who are currently working in health care or who wish to enter the health care field. This program gives students an introduction to the health care environment and provides specific skills for nonprofessional workers in physicians' offices, long-term care facilities or in home health programs.

The flexibility of the program allows health care professionals to upgrade job skills and keep pace with the changing job field.

Students who wish to complete an associate degree may choose the associate of technical studies option to select the courses which match their interests and/or career goals. See page 4 of the catalog for more information.

Scholastic Preparation

High school diploma or GED is required.

State Testing

Upon successful completion of MST 181, the student will be eligible to take the State Tested Nursing Aide test and be eligible to work in long-term care facilities. Completion of MST 182 provides the student with the technical skills required of nursing technicians in most acute care settings.

Health Requirements

Students must meet health requirements prior to taking the clinical courses.

Graduation Requirements

To qualify for a certificate in Multi-Skilled Health Care, students must pass all required courses, complete MST 182 with a C or above and have a minimum cumulative average of 2.0.

Liability Insurance

Students will be billed for liability insurance when registering for MST 181.

Course Number	Course Title	Credit Hours
Fall		
MST 101	Health Care in Changing Times	3
MST 102	Infectious Processes in Health Care	1
MST 181	Nurse Aide Training	6
BIO 102	Medical Terminology	3
EMS 171	Basic Life Support: CPR	1
Winter		
MST 121	Gerontology/Health Issues	3
MST 182	Advanced Nursing Assistant Skills	4
BIO 101	Survey of Microbiology	3
BIO 105	Intro to Anatomy and Physiology	4
– –	Technical Elective	3
Spring		
MST 103	Health Systems Communication	2
ENG 111	English I	4
ITS 12W	Beginning Word Processing	1
LPN 106	Nutrition	1
LPN 107	Diet Therapy	1
PSY 111	Psychology I	3
– –	Technical Elective	3
	Total credit hours	46

Technical electives include: EXS 114, EXS 201, MLT 115, SWK 136, SWK 220.

Nursing Transition LPN to RN

The Registered Nursing program is accredited by the National League for Nursing Accrediting Commission and approved by the Ohio Board of Nursing. The nursing sequence is a four-quarter modification to meet the educational needs of the licensed practical nurse who wishes to become a registered nurse. Other course requirements remain the same as in the two-year Registered Nursing program.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

See Registered Nursing program for program goals.

Scholastic Preparation

Students must be licensed practical nurses and have professional CPR certification. Students must either pass the NUR 114 proficiency test or complete the course prior to enrolling in the transition course. Students must have practiced one year as a LPN within the last five years.

Math competency of all applicants will be tested. Any applicant who does not have an appropriate score must complete DEV 091 Math Fundamentals with a C or better.

Students must take the Excelsior of Nursing exam and receive a passing score (C or better) prior to admission to NUR 173. Information is available with course advisor.

Licensure

Upon completion of the program, the graduate may apply to take the NCLEX-RN examination. Candidates for licensure in Ohio must disclose information related to any prior misdemeanor or felony involving alcohol or drug use or any crime involving gross immorality or moral turpitude. 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. Specific information will be provided prior to beginning the nursing transition course. Second-year students must update health requirements prior to taking clincial courses.

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 courses taken in the clinical nursing 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 4.

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
PSY 221	Human Growth and Development I	3
Spring (or Summer)		
BIO 123	Anatomy and Physiology III	4
BIO 131	Microbiology I	4
PSY 230	Abnormal Psychology	3
Summer		
NUR 173	Nursing Transition	8
Fall		
NUR 274	Nursing IV	5
NUR 275	Nursing V	5
ENG 223	Technical Report Writing	3
– –	Humanities/Social Science Elective	3
Winter		
NUR 276	Nursing VI	11
SOC 110	Sociology	3
Spring		
NUR 267	Nursing VII	4
NUR 268	Nursing VIII	3
NUR 269	Nursing IX	6
NUR 280	Nursing Seminar	2
– –	Humanities/Social Science Elective	3
	Total credit hours	93

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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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 rules.
- 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 technology terms (pertinent only to Medical Office Administration).
- compose business correspondence, research and write business reports and deliver oral presentations.
- transcribe documents using transcribing machines.
- type 50-54 nwpm on a 5-minute timed writing.
- 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 alphabet and numeric keys "by touch" using appropriate techniques to enroll in OAD 101 Document Formatting. 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 begins on page 4.

Office Administration

Office administrators are the key office support personnel whose skill and technical expertise enable organizations to operate smoothly. They serve as managers who may perform traditional secretarial functions and supervise clerical employees. By performing their responsibilities well, they may have opportunities for promotion to management positions.

Course Number	*Course Title*	*Credit Hours*
Fall		
OAD 101	Document Formatting	5
OAD 105	Business English	4
COM 111	Interpersonal Communication	3
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3
Winter		
OAD 102	Document Production	5
OAD 130	Advanced Grammar and Proofreading	4
COM 121	Effective Speaking	3
ENG 111	English I	4
ITS 12A	Windows Concepts	2
Spring		
OAD 103	Integrated Office Applications	4
OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II	4
ENG 221	Business Communications	3
Fall		
ITS 12D	Beginning Database	1
ITS 12S	Beginning Spreadsheet	1
ITS 101	Using the Internet/Web Development	4
ACC 111	Principles of Accounting I	4
– –	BUS *or* ITS Elective*	3
– –	Social Science Elective	3
Winter		
OAD 220	Business Report Writing	4
OAD 245	Machine Transcription	4
OAD 260	Office Simulation	5
EBE 100	Employability Skills	2
ITS 12P	Beginning Presentation Graphics	1
ITS 14S	Intermediate Spreadsheet	2
Spring		
OAD 200	Administrative Office Management	3
OAD 285	Co-op Education	2
ITS 14D	Intermediate Database	2
ITS 14P	Intermediate Presentation Graphics	2
– –	Humanities/Social Science Elective	3
	Total credit hours	100

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

Medical Office Administration

Medical administrators work in physicians' offices, hospitals, nursing homes and other medical settings. They may transcribe dictation, prepare medical records or charts, schedule appointments, handle correspondence, prepare bills and process insurance forms. In addition to excellent keyboarding skills, medical office administrators need expertise with medical terminology and familiarization with medical references. Strong human relations skills are also important as they deal with people in stressful situations.

Scholastic Preparation

Students must possess the ability to key the alphabet and numeric keys "by touch" using appropriate techniques to enroll in OAD 101 Document Formatting. 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 begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
OAD 101	Document Formatting	5
OAD 105	Business English	4
COM 111	Interpersonal Communication	3
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3
Winter		
OAD 102	Document Production	5
OAD 130	Advanced Grammar and Proofreading	4
COM 121	Effective Speaking	3
ENG 111	English I	4
ITS 12A	Windows Concepts	2
Spring		
OAD 103	Integrated Office Applications	4
OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II	4
ENG 221	Business Communications	3
Fall		
OAD 248	Basic Medical Machine Transcription	4
BIO 102	Medical Terminology	4
BIO 105	Intro to Anatomy and Physiology	4
ITS 12S	Beginning Spreadsheet	1
– –	BUS *or* ITS Elective*	3
Winter		
OAD 249	Advanced Medical Machine Transcription	4
OAD 260	Office Simulation	5
OAD 270	CPT - Coding	5
EBE 100	Employability Skills	2
ITS 12D	Beginning Database	1
ITS 12P	Beginning Presentation Graphics	1
Spring		
OAD 256	Medical Office Management	4
OAD 272	ICD-9-CM Coding	5
OAD 285	Co-op Education	2
– –	Social Science Elective	3
– –	Humanities/Social Science Elective	3
	Total credit hours	105

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

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.

Course Number	Course Title	Credit Hours
Fall		
OAD 101	Document Formatting	5
OAD 105	Business English	4
COM 111	Interpersonal Communication	3
ITS 103	Information Technology Basics	3
MTH 106	Business Mathematics	3
Winter		
OAD 102	Document Production	5
OAD 130	Advanced Grammar and Proofreading	4
COM 121	Effective Speaking	3
ENG 111	English I	4
ITS 12D	Beginning Database	1
Spring		
OAD 103	Integrated Office Applications	4
OAD 135	Office Procedures	4
OAD 140	Records Management	3
ENG 112	English II	4
ENG 221	Business Communications	3
	Total credit hours	53

Three departmental certificates are available for students who want to upgrade skills in a particular area. These certificates can be applied for by filling out the certificate application form in the Business Technologies Division in the Brinkman Educational Center.

Machine Transcription Departmental Certificate

Course Number	Course Title	Credit Hours
OAD 103	Integrated Office Applications*	4
OAD 105	Business English	4
OAD 130	Advanced Grammar and Proofreading	4
OAD 245	Machine Transcription	4
	Total credit hours	16

Communications Departmental Certificate

Course Number	Course Title	Credit Hours
OAD 105	Business English	4
OAD 130	Advanced Grammar and Proofreading	4
COM 111	Interpersonal Communication	3
COM 121	Effective Speaking	3
ENG 221	Business Communications	3
	Total credit hours	17

Medical Transcription Departmental Certificate

Course Number	Course Title	Credit Hours
OAD 103	Integrated Office Applications*	4
OAD 248	Basic Medical Machine Transcription**	4
OAD 249	Advanced Medical Machine Transcription	4
BIO 102	Medical Terminology	4
BIO 105	Intro to Anatomy and Physiology	4
	Total credit hours	20

Please note: The courses listed above in the departmental certificates may have prerequisites beyond the courses listed that are part of the certificate. Students with appropriate backgrounds may have the prerequisites listed below waived by their program advisor.

*Prerequisite(s): OAD 101, OAD 102 (or advisor permission)

**Prerequisite(s): OAD 101, OAD 102, OAD 105, OAD 130 (or advisor permission)

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 developmental 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 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
PHO 111	Photography I	3
BUS 105	Introduction to Business	3
ENG 111	English I	4
– –	Humanities/Social Science Elective	3
Winter		
PHO 112	Photography II	3
ART 130	Appreciation of the Arts	3
COM 111	Interpersonal Communication	3
CRJ 118	Forensic Photography	3
Spring		
PHO 121	Color Photography I	3
ART 135	Art History III	3
ENG 112	English II	4
PSY 111	Psychology I	3
Summer		
PHO 122	Color Photography II	4
PHO 124	Photography Portfolio	4
PHO 180	Photography Practicum	3
	Total credit hours	49

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 who completes an initial assessment 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.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

The Physical Therapist Assistant program has a limited enrollment and there is a special admissions process for entering the Physical Therapist Assistant course sequence. Please see the College catalog and contact the Admissions Office to request an admissions packet. The policies for this program and for admission to this program take precedence over any general policy outlined in the College catalog.

Program Goals

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

- work in an ethical, legal, safe and effective manner under the supervision of a physical therapist.
- demonstrate effective communications.
- demonstrate skill in utilizing testing and measurement techniques.
- demonstrate skill in implementing treatment practices to complete a comprehensive treatment plan.

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

Following admission to the program, a physical exam, a two-step Mantoux test, a health history, professional CPR and additional medical tests may be required by clinical sites prior to the beginning of the directed practice courses. Fingerprinting is required as students will be working with children and nursing home residents.

Liability Insurance

Students will be billed for liability insurance for the academic year of directed practice courses.

Accreditation

The Clark State PTA program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

Humanities/Social Science Electives

A complete listing of humanities and social science electives begins on page 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
PTA 144	Introduction to PTA	5
BIO 102	Medical Terminology	3
BIO 118	Muscle Anatomy	2
BIO 121	Anatomy and Physiology I	4
ENG 111	English I	4
ITS 12W	Beginning Word Processing	1
Winter		
PTA 145	PTA Procedures I	4
BIO 122	Anatomy and Physiology II	4
BIO 230	Biomechanics	4
ENG 112	English II	4
PSY 111	Psychology I	3
Spring		
PTA 146	PTA Procedures II	5
PTA 160	PTA Rehabilitation I	6
BIO 123	Anatomy and Physiology III	4
PSY 221	Human Growth and Development I	3
Summer		
PTA 241	PTA Procedures III	5
PSY 222	Human Growth and Development II	3
– –	Humanities/Social Science Elective	3
Fall		
PTA 260	PTA Rehabilitation II	6
PTA 281	Directed Practice I	3
PTA 291	Seminar I	2
COM 111	Interpersonal Communication	3
Winter		
PTA 265	PTA Rehabilitation III	6
PTA 270	PTA Trends and Issues	2
PTA 282	Directed Practice II	3
PTA 292	Seminar II	2
ENG 223	Technical Report Writing	3
– –	Humanities/Social Science Elective	3
Spring		
PTA 283	Directed Practice III	6
PTA 293	Seminar III	2
	Total credit hours	108

Practical Nursing Certificate

The 12-month Practical Nursing Certificate is approved by the Ohio Board of Nursing and the Ohio Board of Regents.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Scholastic Preparation

Entering students must possess a high school diploma or certificate of General Education Development (GED). Math competency of all applicants will be tested. Any applicant who does not have an appropriate score must complete DEV 091 Math Fundamentals with a C or better. MST 181 or equivalent is a prerequisite.

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 misdemeanor or felony involving alcohol or drug use or any crime involving gross immorality or moral turpitude. 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 the first clinical nursing course.

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, LPN 106, LPN 107, LPN 125 and all clinical courses.

CPR Certification

Practical Nursing students are required to present evidence of having completed a professional CPR course before enrolling in LPN 160 or any subsequent clinical course.

Liability Insurance

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

Course Number	*Course Title*	*Credit Hours*
Summer		
LPN 106	Nutrition	1
LPN 107	Diet Therapy	1
BIO 102	Medical Terminology	3
ENG 111	English I	4
ITS 12W	Beginning Word Processing	1
NUR 114	Dosage Calculations	1
PSY 111	Psychology I	3
PSY 221	Human Growth and Development I	3
Fall		
LPN 125	Introduction to Disease Processes	4
LPN 130	Nursing Trends I	2
LPN 160	Fundamentals of Nursing I	6
BIO 105	Intro to Anatomy and Physiology	4
Winter		
LPN 145	Pharmacology	3
LPN 164	Fundamentals of Nursing II	6
LPN 181	Obstetrical Nursing Theory	2
LPN 185	Pediatric Nursing	5
Spring		
LPN 133	Nursing Trends II	2
LPN 190	Medical-Surgical Nursing	14
	Total credit hours	65

Registered Nursing

The Registered Nursing program is accredited by the National League for Nursing Accrediting Commission and approved by the Ohio Board of Nursing. This program received the Ohio Board of Regents Program Excellence Award.

The program schedule that follows is designed for full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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 individual and families from diverse cultures through the life cycle.
- integrate knowledge of nursing, biological sciences, social sciences and humanities into the practice of nursing.
- develop and implement health teaching plans for individuals and small groups to assist them in achieving maximum health potential.
- practice with the ethical/legal framework of nursing.

Scholastic Preparation

Math competency of all applicants will be tested. All applicants must have an appropriate score on the math placement test or complete DEV 091 Math Fundamentals with a C or better. Registered Nursing students are required to present evidence of having completed the professional CPR course before enrolling in NUR 170 or any subsequent clinical course in the curriculum. MST 181 or equivalent is a prerequisite for the program. Health Technologies admissions policies begin on page 106.

Licensure

Upon completion of the program, the graduate may apply to take the NCLEX-RN examination. Candidates for licensure in Ohio must disclose information related to any prior misdemenor or felony involving alcohol or drug use or any crime involving gross immorality or moral turpitude. 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.

CPR Certification

Registered Nursing students are required to present evidence of having completed the professional CPR course before enrolling in NUR 170 or any subsequent clinical course in the curriculum.

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 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 4.

Course Number	*Course Title*	*Credit Hours*
Summer (or Fall)		
NUR 114	Dosage Calculations	1
BIO 102	Medical Terminology	3
ITS 103	Information Technology Basics	3
PSY 111	Psychology I	3
Fall		
NUR 170	Nursing I	6
BIO 121	Anatomy and Physiology I	4
Winter		
NUR 171	Nursing II	6
BIO 122	Anatomy and Physiology II	4
ENG 111	English I	4
PSY 221	Human Growth and Development I	3
Spring		
NUR 172	Nursing III	8
BIO 123	Anatomy and Physiology III	4
BIO 131	Microbiology I	4
PSY 230	Abnormal Psychology	3
Fall		
NUR 274	Nursing IV	5
NUR 275	Nursing V	5
ENG 112	English II	4
– –	Humanities/Social Science Elective	3
Winter		
NUR 276	Nursing VI	11
ENG 223	Technical Report Writing	3
SOC110	Sociology	3
Spring		
NUR 267	Nursing VII	4
NUR 268	Nursing VIII	3
NUR 269	Nursing IX	6
NUR 280	Nursing Seminar	2
– –	Humanities/Social Science Elective	3
	Total credit hours	108

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 course.

Interested students should follow the usual admissions process and also contact the Health Technologies Division for information about the registration process.

The requirements for enrolling in the Evening Registered Nursing program and for licensure are the same as those for the day program.

The program schedule that follows is designed for part-time students who have completed all prerequisites and who have no developmental recommendations. Individuals taking developmental courses will require additional quarters of study. Students should consult their academic advisors for help in planning their schedules.

See Registered Nursing program for program goals.

Scholastic Preparation

Math competency of all applicants will be tested. All applicants must have an appropriate score on the math placement test or complete DEV 091 Math Fundamentals with a C or better. Registered Nursing students are required to present evidence of having completed the professional CPR course before enrolling in NUR 170 or any subsequent clinical course in the curriculum. MST 181 or equivalent is a prerequisite for the program. Health Technologies admissions policies begin on page 106.

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 clinical nursing 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 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
ENG 111	English I	4
ITS 103	Information Technology Basics	3
PSY 111	Psychology I	3
Winter		
ENG 112	English II	4
PSY 221	Human Growth and Development I	3
Spring		
ENG 223	Technical Report Writing	3
PSY 230	Abnormal Psychology	3
Summer		
BIO 102	Medical Terminology	3
BIO 131	Microbiology	4
Fall		
BIO 121	Anatomy and Physiology I	4
SOC110	Sociology	3
Winter		
BIO 122	Anatomy and Physiology II	4
– –	Humanities Elective	3
Spring		
BIO 123	Anatomy and Physiology III	4
– –	Humanities/Social Science Elective	3
Fall		
NUR 114	Dosage Calculations	1
NUR 170	Nursing I	6
Winter		
NUR 171	Nursing II	6
Spring		
NUR 172	Nursing III	8
Summer		
NUR 274	Nursing IV	5
NUR 275	Nursing V	5
Fall		
NUR 276	Nursing VI	11
Winter		
NUR 267	Nursing VII	4
NUR 268	Nursing VIII	3
NUR 269	Nursing IX	6
NUR 280	Nursing Seminar	2
	Total credit hours	108

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 full-time students who have completed all prerequisites and who have no developmental 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.

Program Goals

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 basic listening skills in combination with a helping interview.
- know the roles of the social services practitioner/CD counselor and will apply them 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.

Health Requirements

Students must meet health requirements before taking the first practicum course.

Graduation Requirements

A grade of C or better in all SWK courses is required for graduation. Graduates must demonstrate professional ethical behavior, effective oral and written communication, professional documentation skills, basic listening skills, an awareness of personal biases as they effect 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 4.

Course Number	*Course Title*	*Credit Hours*
Fall		
SWK 100	Intro to Social Welfare and Social Work	4
SWK 105	Chemical Dependency I	4
ENG 111	English I	4
PSY 111	Psychology I	3
SOC110	Sociology	3
Winter		
SWK 120	Social Work Methods and Procedures	4
SWK 136	Affective Education	4
ENG 112	English II	4
ITS 103	Information Technology Basics*	3
PSY 221	Human Growth and Development I	3
Spring		
BIO 110	Fundamentals of Human Biology	4
ENG 223	Technical Report Writing	3
PSY 222	Human Growth and Development II	3
SOC 240	Racial and Cultural Minorities	3
– –	Technical Elective	3
Fall		
SWK 231	General Practice/Crisis Intervention	3
SWK 271	Social Service Practicum I**	2
SWK 291	Social Service Seminar I**	2
PSY 230	Abnormal Psychology	3
– –	Technical Elective***	3
Winter		
SWK 232	Generalist Practice with Families	3
SWK 234	Case Management I	3
SWK 272	Social Services Practicum II	2
SWK 292	Social Services Seminar II	2
– –	Humanities Elective	3
Spring		
SWK 130	Social Policy and Service	4
SWK 235	Case Management II	4
SWK 273	Social Services Practicum III	2
SWK 293	Social Services Seminar III	2
– –	Humanities/Social Science Elective	3
	Total credit hours	93

*Students may substitute ITS 102 for ITS 103 with prior department approval.

**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 210, SWK 215, SWK 220.

Social Services Departmental Certificates

Two departmental certificates are available for students to meet requirements for the Ohio Credentialing Board and Ohio Department of Mental Retardation and Developmental Disabilities. These certificates can be applied for by filling out the certificate application form in the Public Services Office in the Applied Science Center.

Chemical Dependency Departmental Certificate

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

Mental Retardation and Developmental Disabilities Departmental Certificate

SWK 220	Social Service to Individuals with MR/DD	3
SWK 297	Special Topics in Social Work: Principles of Behavior Management	3
SWK 298	Special Topics in Social Work: Principles of Work and Team Processes	4
	Total credit hours	10

Theatre Arts

Clark State offers two programs in theatre, both developed in conjuction 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 Composition (8 credit hours)
English I and English II

Area 2 - Literature and the Arts (9 credit hours)
Introduction to Theatre*, Theatre History I, Creative Writing or Drama

Area 3 - Humanities (9 credit hours)
Western Civilization I, II, III

Area 4 - Social Sciences (15 credit hours)
Psychology I, Abnormal Psychology, Sociology, any Regional Studies course, World Regional Geography or Comparing Cultures

Area 5 - Mathematics and Computers (6 credit hours)
Math in Today's World or College Algebra I; Information Technology Systems requirement of three credit hours (Information Technology Basics 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. Possible classes include BIO 110, BIO 131, BIO 140, CHM 110, GLG 113, GLG 121, PHY 110, PHY 120.)

Success Seminar (1-3 credit hours)
One course from those listed under Personal Growth.

Option One – Performance Theatre

Concentration (15-17 credit hours)
Acting I*, Acting II, Speech and Voice for Actors and Dance and Movement for the Actor

Electives (15-17 credit hours)
Children's Theatre, Theatre History II, Stagecraft I*, Theatre Laboratory I, II, III**, 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*, II, Acting for the Non-major, Lighting I

Electives (15-17 credit hours)
Lighting II, Sound I, Theatre Labs I, II, III**, Sound II, Theatre electives (3-5 credit hours), Theatre History II

Program Goals
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.
- analize a design package and use it along with scene shop tools to construct and paint a set.
- operate sound equipment and boards and lighting equipment and boards.
- demonstrate competency in fulfilling several roles within the theatre.
- demonstrate an understanding of the roles of all theatre personnel and use correct theatre terminology.
- adhere to theatre safety guidelines.

*Take during the first quarter at Clark State.

**Up to 6 credit hours may be taken for degree credit.

Course Descriptions

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 DEV may not be accepted by other colleges and universities for transfer credit. 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 developmental education course in English or mathematics may be considered a prerequisite to some courses in English or mathematics, depending on the student's placement test scores. In other cases prerequisite courses are necessary to enter the second or third course of a sequence.

Sometimes the prior knowledge required for a course can be obtained at the same time as the course itself. In this case, it is called a corequisite. Corequisite courses must be taken during the same term or prior to the selected course.

It is the student's responsibility to be aware of course prerequisites and corequisites which are listed in the course descriptions and also any courses required prior to the listed prerequisite(s). Faculty, in conjunction with the divisional dean or Dean of Student Affairs, may withdraw students who are enrolled in courses for which they do not have the prerequisite(s) or corequisite(s).

(ACC) Accounting

ACC 111 Principles of Accounting I (4)
Fundamental accounting concepts, terms, and procedures; analyzing, classifying and recording accounting data; subsidiary ledgers; special journals, adjusting and closing accounts; accounting cycle completion; financial statements; payroll and payroll taxes; control over cash; bank reconciliation.

ACC 112 Principles of Accounting II (4)
Accounting for a merchandising business, receivables, inventories, plant and intangible assets. Corporations: organization and equity rights, retained earnings, and dividends. Additional emphasis on financial statements.
Prerequisite(s): ACC 111

ACC 113 Principles of Accounting III (4)
Corporations—long term liabilities. Financial statement analysis, statement of cash flows, managerial accounting principles and systems, manufacturing operations and job order cost accounting, differential analysis.
Prerequisite(s): ACC 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 windows-based accounting software. Includes study of both service and merchandising businesses.
Prerequisite(s): ACC 111 or instructor permission

ACC 211 Intermediate Accounting I (4)
Review of accounting principles and procedures, including financial reporting, users of financial information, and development of accounting standards. Advanced study of financial statements to include the income statement, retained earnings statement, balance sheet, and statement of cash flows.
Prerequisite(s): ACC 112

ACC 212 Intermediate Accounting II (4)
Cash and receivables. Cost of goods sold and inventories including cost allocation, valuation, estimation and non-cost valuation procedures. Noncurrent operating assets including acquisition, utilization, and retirement.
Prerequisite(s): ACC 113, ACC 211

ACC 213 Intermediate Accounting III (4)
Current, contingent, and long-term liabilities. Owner's equity, including contributed capital and retained earnings. Financial reporting and analysis.
Prerequisite(s): ACC 212

ACC 221 Tax Accounting I (4)
Theory of individual taxes and their application under the Internal Revenue Code. Introduction and preparation of individual tax returns.

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, franchise tax returns.
Prerequisite(s): ACC 221
Corequisite(s): ACC 112

ACC 233 Cost Accounting (4)
Cost accounting principles including job order cost, process costing.
Prerequisite(s): ITS 12S, ACC 113

ACC 250 Government and Nonprofit Accounting (4)
Fundamental accounting procedures for nonprofit and governmental institutions. To include state and local governmental accounting, accounting for health care organizations, and accounting for colleges and universities.
Prerequisite(s): ACC 113, ACC 211

(AGR) Agriculture

AGR 104 Agricultural Survey and Employment Skills (3)
Survey of Agriculture Business and Horticulture Industries; career opportunities, goals, employability skills, including resumes, cover letters, interview preparation, professional development, college and degree requirements, student responsibilities; industry expectations.

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.

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 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: $15

AGR 133 Turf Science (3)
Routine cultural practices necessary for growing turf for specialized uses including mowing, fertilization, irrigation.
Lab fee: $10

AGR 143 Landscape Plant Materials (4)
Recognition of trees, shrubs, ground covers and related plant materials commonly used in landscapes, grounds and golf courses. Usage, design, installation, care and culture of landscape plants utilizing a variety of learning resources.
Lab fee: $10

AGR 145 Herbaceous Plant Materials (4)
Recognition of annuals, perennials, bulbs, monocots used in the garden and landscape. Usage, design, installation and culture of herbaceous plants in the landscape utilizing a variety of learning resources.
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.
Lab fee: $12

AGR 151 Fertilizers and Fertility (4)
Principles of soil fertility, plant nutrient requirements, nutrient sources, application methods, and environmental concerns.
Prerequisite(s): AGR 150

AGR 174 Agribusiness Principles (3)
Basic management principles for planning, organizing and operating a small agribusiness successfully.

AGR 180 Ag Equipment Operation and Management (3)
The operating principles, safety, maintenance, record keeping requirements and purchasing of various equipment utilized in various agricultural operations, services and businesses.
Lab fee: $12

AGR 181 Horticulture Equipment Operation and Management (3)
The operating principles, safety, maintenance and record keeping requirements of various horticulture equipment utilized in the overall care of general landscapes, general turfgrass areas and golf courses.
Lab fee: $12

AGR 185 Vehicle Operations and Management (3)
Operating principles, safety and maintenance of transport equipment utilized in various agricultural/horticultural businesses.

AGR 189 Applied Practices in Agriculture I (1)
Application of agricultural or horticultural principles and techniques under supervision of college staff and faculty.

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

AGR 213 Animal Nutrition (4)
Principles of animal nutrition and feedstuffs including digestion, absorption, assimilation, and utilization of nutrients, balancing rations, and identification of feedstuffs.
Lab fee: $12

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
Lab fee: $10

AGR 225 Landscape Maintenance (4)
Practices involved in the maintenance of landscape sites. Pruning, transplanting, mulching, watering and general plant care.
Lab fee: $15

AGR 226 Landscape Design (4)
A basic study of landscape design concepts with emphasis on site planning, design principles, plant utilization and irrigation systems
Lab fee: $12

AGR 231 Plant Propagation (4)
Principles, techniques, materials, and necessary facilities needed by commercial horticulture growers to propagate floral, greenhouse, and landscape plants.
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.

AGR 273 Ag Economics/Finance (3)
Introduction to microeconomics and macroeconomics and how basic economic forces influence decisions of producers and consumers of food and fiber products.

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

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 insturctor. Oral and/or written reports of the experience required.
Prerequisite(s): AGR 104, AGR 194

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

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.
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 enviornment.
Lab fee: $3

ART 133 Art History I (3)
Survey of visual art from medieval times to Renaissance. Introduction to basic concepts of visual and stylistic analysis.
Lab fee: $3

ART 134 Art History II (3)
Survey of visual art from late medieval times to beginnings of the modern era.
Lab fee: $3

ART 135 Art History III (3)
Survey of visual art during post impressionist to modern era.
Lab fee: $3

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, other interrelated art forms such as music, dance, and drama also discussed as transmitters of traditional cultural values.

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 and develop an understanding of the meanings of medical terms including prefixes, suffixes, and root words. Learn to use abbreviations for medical documentation and apply knowledge of medical terminology.

BIO 105 Introduction to Anatomy and Physiology (4)
The human body's structure and function with emphasis on all systems.

BIO 110 Fundamentals of Human Biology (4)
The human organism: structure and organization, integrity and homeostasis, metabolism, responsiveness, reproduction, growth and development. Aging, diseases and disorders included.
Prerequisite(s): DEV 091
Lab fee: $40

BIO 111 Biology I (4)
Cell biology and genetics. Cellular molecules, cellular anatomy, cellular processes including respiration and photosynthesis, cellular reproduction. Mendelian and molecular genetics.
Prerequisite(s): CHM 110, CHM 012 or high school Chemistry
Lab fee: $40

BIO 112 Biology II (4)
Evolution, diversity and ecology or 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): BIO 111
Lab fee: $40

BIO 113 Biology III (4)
The human as organism; a comparative look at structure, function and behavior.
Prerequisite(s): BIO 111
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.
Corequisite(s): BIO 102, PTA 144 or permission of instructor

BIO 121 Anatomy and Physiology I (4)
Human cells, tissues, skin, bones, muscles, nervous system cells, autonomic nervous system.
Prerequisite(s): CHM 012 or CHM 110
Corequisite(s): BIO 102
Lab fee: $18

BIO 122 Anatomy and Physiology II (4)
Human circulatory, respiratory, urinary, digestive systems, acid-base and fluid and electrolyte balance, metabolism.
Prerequisite(s): BIO 102, BIO 121
Lab fee: $18

BIO 123 Anatomy and Physiology III (4)
Central and peripheral nervous system, special senses, endocrine and lymphatic systems, immunity, reproduction, development and genetics.
Prerequisite(s): BIO 122
Lab fee: $18

BIO 131 Microbiology I (4)
Study of bacteria, fungi, protista, rickettsiae, chlamydia, viruses, and helminths. Emphasis on bacteria and their relationship to health.
Lab fee: $75

BIO 134 Medical Microbiology I (5)
Identification of bacteria by microscope, media, inoculation, biochemical activities and sensitivity testing. Basic microbiology concepts. Basic disease processes.
Prerequisite(s): Admission to MLT Program
Corequisite(s): MLT 121
Lab fee: $80

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.
Lab fee: $40

BIO 210 Exercise Physiology (4)
Examines the effects of exercise on the body. Knowledge of energy systems used during exercise. Study of adaptations of the body through fitness training. Laboratory practice.
Prerequisite(s): BIO 121, BIO 122, EXS 114
Corequisite(s): EXS 119
Lab fee: $15

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 144
Corequisite(s): BIO 122, PTA 145
Lab fee: $15

BIO 233 Immunology (4)
Principles and theories of the production and characteristics of antigen-antibody reactions, formation and reactions of antigens and antibodies. Principles and techniques of agglutination, precipitation, flocculation, immunodiffusion, immunofluorescence, ELISA and EIA.
Prerequisite(s): MLT 181, MLT 191
Corequisite(s): BIO 234, CHM 231
Lab fee: $80

BIO 235 Medical Microbiology II (6)
Laboratory identification of microbial agents associated with disease in man. Techniques to isolate, identify, and evaluate the presence of clinically significant microorganisms.
Prerequisite(s): BIO 134
Corequisite(s): BIO 233
Lab fee: $80

(BUS) Business

BUS 105 Introduction to Business (3)
A broad survey of the American business system encompassing social responsibilities of business, our legal environment and business ethics, government regulation and taxation, forms of business ownership, small business administration, business management, organized labor, and other topics.

BUS 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.
Lab fee: $10

BUS 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.

BUS 140 Introduction to Electronic Business (3)
A basic understanding of electronic business and the unique requirements of conducting business in the electronic media of the Internet.
Prerequisite(s): BUS 105 and ITS 103 or GPH 100

BUS 142 Electronic Business Applications (3)
Application of electronic business techniques and tools. Development of electronic commerce sites; management issues of electronic commerce. Legal, ethical, social responsibility issues.
Prerequisite(s): BUS 140
Lab fee: $10

BUS 200 Customer Service (4)
A broad-based course including philosophy, purpose and techniques for providing excellent customer service.

BUS 214 Small Business Theory and Practice (4)
Small business and entrepreneurship. Decision for self-employment through small business opportunities; business planning, financing, marketing, and management. Integration of functional business courses into a balanced overview of entrepreneurship. Application through group activities and projects.
Prerequisite(s): ACC 111, BUS 105, BUS 112
Corequisite(s): BUS 270

BUS 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): BUS 105, BUS 106, BUS 112

BUS 243 Principles of Marketing (4)
The functions of marketing products and services. Product development, channels of distribution, pricing structures, promotional aspects, along with electronic marketing.

BUS 245 Sales/Sales Promotion (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.

BUS 250 Leadership in Organizations (4)
Development of leadership skills, personal philosophy. Integrates concepts and practice in group settings.

BUS 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.

BUS 266 Quantitive Business Methods (4)
Application of practical business mathematics and statistical processes to analyze business situations.
Prerequisite(s): MTH 106

BUS 268 Introduction to International Business (4)
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): BUS 105

BUS 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

BUS 272 Production and Operations Management (3)
The design and managing of production operations, including productivity, quality issues, strategy and capacity planning, location, layout, human resources, just-in-time systems, materials requirement planning, and project management.
Prerequisite(s): BUS 112 and BUS 266 or STT 264

BUS 280 Current Issues in Business (4)
Explore factors influencing current business directions using information technology and research.
Prerequisite(s): BUS 105, BUS 106, BUS 112, ITS 103 or instructor permission

BUS 290 Business Seminar (4)
Quarterly management decisions of finance, manufacturing, and sales for companies in a competitive market over a simulated period, giving consideration to economic forecast, relative market position, and company objectives. A capstone course.
Prerequisite(s): BUS 105, BUS 112, BUS 243,ITS 103
Corequisite(s): BUS 270

(CET) Civil Engineering

CET 203 Construction Methods (4)
Methods, materials and techniques used in the construction industry. Topics covered include site preparation, concrete and masonry, wood, metals and plastics. Paving materials and their application will also be covered.
Lab fee: $20

CET 221 Soil Mechanics (4)
The engineering properties of soils and how they may be tested. Strength, settlement, consolidation, slope stability, active and passive pressures and applications to design and construction.
Prerequisite(s): ENT 101, MTH 120 or MTH 121
Corequisite(s): MTH 140

(CHM) Chemistry

CHM 012 Introductory Chemistry (4)
Preparation for General Chemistry including measurement, the metric system, atomic structure, periodic law, formation and naming of compounds, chemical bonding,
ions and valences, chemical reactions and equations, stoichiometric calculations, gas laws, introduction to solutions, acids and bases. Institutional credit only.
Prerequisite(s): DEV 103
Corequisite(s) for MLT: DEV 102
Lab fee: $15

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) for AA students: DEV 101. For RN students: Dev 091
Lab fee: $15

CHM 119 Chemistry for Technicians (4)
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): Acceptance into MLT program
Lab fee: $35

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): CHM 012 or an appropriate score on the chemistry placement test, DEV 103, or appropriate score on the math placement test.
Corequisite(s): MTH 120 or MTH 121
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
Corequisite(s): MTH 122
Lab fee: $46

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
Corequisite(s): MTH 122
Lab fee: $30

CHM 161 Clinical Chemistry (6)
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): BIO 134, MLT 122
Corequisite(s): MLT 110
Lab fee: $80

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, 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)
Techniques, understanding,and skills required for effective interpersonal communication, focusing on linguistic, psychological and cultural factors affecting the communication process.

COM 121 Effective Speaking I (3)
Speaking in a variety of situations. Selection, development, and evaluation of public communication.

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.

COM 200 Basic Reporting and News Writing (3)
A beginning course in reporting and news writing with an emphasis on journalistic style and grammer, 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

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

(COR) Corrections

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.
Corequisite(s): CRJ 100
Lab fee: $10

COR 105 Probation and Parole (4)
History and philosophy of probation, aftercare, and other community programs for juvenile and adult offenders; function and philosophy of parole, current laws and case studies.
Prerequisite(s): COR 100
Corequisite(s): CRJ 120

COR 130 Adult/Juvenile Corrections (4)
Facilities, programs, and procedures for detention and incarceration; variations due to age, sex, offense of individual, social structure of facilities; humanistic control of incarcerated persons.
Prerequisite(s): COR 100, CRJ 120
Lab fee: $10

COR 280 Jail Practicum (4)
Field service training, educational experience through appropriate observation and work assignment to witness function and operation of the jail, case laws, current trends.
Prerequisite(s): COR 130, COR 100, CRJ 120
Lab fee: $10

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 130, COR 100, CRJ 120
Lab fee: $10

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 100, COR 130, COR 280, CRJ 120
Lab fee: $10

(CRE) Court Reporting

CRE 101 Machine Theory (6)
Presentation of the keyboard and theory of machine shorthand and phonetic writing. Intensive practice dictation with emphasis on rapid and accurate reading of notes. Students should attain a minimum speed of 60 wpm on dictation of familiar material with rapid readback.

CRE 102 Speed Building I (4)
Development of writing skills and reading notes with practice on new and familiar material. The course encompasses speeds ranging from 60-120 WPM.
Prerequisite(s): CRE 101

CRE 103 Speed Building II (4)
Development of writing skills and reading notes with practice on new and familiar material. The course encompasses speeds ranging from 80-140 WPM.
Prerequisite(s): CRE 102

CRE 110 Survey/Court Reporting (1)
An overview of the opportunities available in the field of court reporting, including the skills and knowledge required, the professional organizations, and the ethics of court reporting.

CRE 120 Law and Legal Terminology (3)
The judicial system and the legislative process with emphasis on legal and Latin terminology as applied in civil and criminal law.

CRE 200 Introduction to Testimony (4)
Development of skill in writing question-and-answer dictation with emphasis on speeds ranging from 80-140 WPM.
Prerequisite(s): CRE 102
Corequisite(s): CRE 103

CRE 202 Testimony II (3)
Practice in two-voice dictation with speeds ranging from 100-160 WPM.
Prerequisite(s): CRE 200

CRE 203 Testimony III (3)
Development of writing skills in two-voice and multi-voice dictation. The course encompasses speeds ranging from 120-180 WPM.
Prerequisite(s): CRE 202

CRE 204 Testimony IV (3)
Development of writing skills in two-voice and multi-voice dictation. The course encompasses speeds ranging from 140-200 WPM.
Prerequisite(s): CRE 203

CRE 205 Testimony V (3)
Development of writing skills in two-voice and multiple-voice dictation at the finishing speed of 225 wpm, with preparation of transcripts requiring a percentage of accuracy as established in the course syllabus.
Prerequisite(s): CRE 204

CRE 220 Anatomy/Medical Terminology (4)
Skeletal, muscular, and nervous systems including units on regions of the body, tissues, and membranes with emphasis on definition of medical prefixes and suffixes. A vocabulary enrichment course including anatomy and medical terminology for court reporting majors.

CRE 221 Literary I (3)
Literary dictation. The course encompasses speeds ranging from 100-150.
Prerequisite(s): CRE 103

CRE 222 Literary II (3)
Literary dictation. The course encompasses speeds ranging from 120-160 WPM.
Prerequisite(s): CRE 221

CRE 223 Literary III (3)
Literary dictation. The course speed goal is the terminal speed of 180.
Prerequisite(s): CRE 222

CRE 224 Literary Skillbuilding (3)
Literary dictation. Encompasses speeds ranging from 100-180 wpm. Designed to maintain and/or increase literary speed.
Prerequisite(s): CRE 103

CRE 231 Jury Charge I (3)
Jury charge dictation. The course encompasses speeds ranging from 100-160 WPM.
Prerequisite(s): CRE 103

CRE 232 Jury Charge II (3)
Jury charge practice and dictation. The course encompasses speeds ranging from 120 - 180 WPM.
Prerequisite(s): CRE 231

CRE 233 Jury Charge III (3)
Jury charge practice and dictation. The course speed goal is the terminal speed of 200 WPM.
Prerequisite(s): CRE 232

CRE 241 Computer Assisted Transcription I (3)
Use of the computer to assist in preparing transcripts, including computer writers and translation software.
Prerequisite(s): CRE 200
Lab fee: $10

CRE 242 Computer Assisted Transcription II (3)
Emphasis on applying principles learned in CRE241 to actual or simulated transcripts, including realtime, litigation support, and CIC.
Prerequisite(s): CRE 241
Lab fee: $10

CRE 245 Office Management (4)
General office procedures for maintaining the court reporting office, including indexing and filing of notes, marking exhibits, administering the oath, reading back, parentheticals, use of videotaping, transcription using word processing, laws pertaining to the profession, professional development in dress and conduct, etc.
Prerequisite(s): CRE 202, OAD 113

CRE 280 Courtroom Practice (3)
Reporting practice in both the freelance and official areas. Minimum writing hours: 40 of officialship, 40 of freelance.
Prerequisite(s): CRE 205, CRE 223, CRE 233, CRE 245

(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.

CRJ 112 Traffic Management (3)
The principles of traffic control, accident reconstruction, and enforcement of the law.

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.
Lab fee: $15

CRJ 118 Forensic Photography (3)
The application of photography to criminal and civil investigations, including the preparation of courtroom presentation.
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.

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.

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.

CRJ 201 Police Administration (3)
Examination of administrative design, including personnel selection, training, advancement, discipline, and utilization of resources.

CRJ 216 Community Relations (3)
The development of skills to resolve communication problems between citizens and the police.

CRJ 221 Forensic Science I (5)
The search for, recognition of, and preservation of physical evidence found at crime scenes.
Lab fee: $15

CRJ 222 Forensic Science II (4)
Familiarization with selected laboratory techniques commonly used by law enforcement agencies.
Lab fee: $15

CRJ 226 Interview and Interrogation (3)
Examines the dynamics of the art of interviewing and interrogation of witnesses, victims, and suspects.

CRJ 228 Criminal Investigation (3)
Reconstruction of the sequences of a criminal act, including searching, preserving, and evaluating physical evidence.

CRJ 230 Social Justice (3)
Exploration of job stresses; the social value and ethics of the criminal justice process.

CRJ 231 Criminal Law (3)
Overview of the criminal procedures, criminal law, common defense, and prosecutorial processes.

CRJ 232 Ohio Criminal Code (3)
The explanation of Ohio's statutory code; elements of offenses and lesser included offenses.

CRJ 250 Community Resources (3)
A service learning class where the student will participate and learn what resources are available to police officers such as homeless shelters, detoxification centers and food pantries.

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, 112, 116, 118, 120, 123, 125, 201, 211, 216, 221, 212, 222, 226, 228, 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.
Corequisite(s): CRJ 289
Lab fee: $325

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.
Corequisite(s): CRJ 287
Lab fee: $325

(CSD) Computer Software Development

CSD 12S Beginning SQL (2)
Step-by-step approach to learning SQL. Topics include: data definition, table maintenance, single/multiple table queries, reports, database administration and embedded SQL.
Prerequisite(s): ITS 12A, ITS 12D or instructor permission

CSD 105 Programming Fundamentals (4)
Fundamental programming constructs and concepts. Includes the study of variables, constants, looping, strings, flowcharting basics, programming logic, and data validation techniques. Introduction to object - oriented programming.
Prerequisite(s): Dev 101, knowledge level equivalent to ITS 080
Lab fee: $10

CSD 106 Introduction to Scripting Languages (4)
An Introduction to fundamentals of scripting languages used to build Web application components.
Prerequisite(s): CSD 105

CSD 111 Visual Basic Fundamentals (5)
A Windows application development tool. Topics include: programming methodologies, values, and variables, instructions and groupings, user interaction, graphics, objects and controls, arithmetic functions, text files, error trapping and debugging.
Prerequisite(s): CSD 105 or instructor permission
Lab fee: $10

CSD 112 Visual Basic - Desktop (5)
Use Microsoft Visual Basic design and implement Win32 desktop applications. Use local components. Employ a two-tier architecture that uses remote data.
Prerequisite(s): CSD 111 or instructor permission
Lab fee: $10

CSD 113 Visual Basic - Distributed (5)
Use Microsoft Visual Basic. Design and implement distributed application solutions. Use a network in a multi-tier architecture to distribute presentation services, business logic, and data services. Access different data sources.
Prerequisite(s): CSD 112 or instructor permission
Lab fee: $10

CSD 145 Unix Concepts (4)
road background of concepts, facilities and characteristics of contemporary operating systems. Surveys at a conceptual level and offers examples of the role, scope, and complexity of operating systems. Concentration on the Linux operating system.
Prerequisite(s): CSD 105 or instructor permission
Lab fee: $10

CSD 150 Database Administration (5)
Install and configure a MS SQL Server Database. Manage and maintain data, configure and manage security, monitor and maintain database, and troubleshoot problems.
Corequisite(s): CSD 105 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): CSD 150 or instructor permission
Lab fee: $10

CSD 214 C Concepts I (4)
Programming concepts and techniques including input, output, arithmetic and logic operations, looping file handling, report generation, data types, pointers and data structures. Practical applications written, entered, tested and debugged using principles of the C/C++ language.
Prerequisite(s): CSD 105 or instructor permission
Lab fee: $10

CSD 215 C Concepts II (4)
Introduction of object-oriented programming concepts using the Visual C++ language. Topics include: class declarations, data and function members, creating and using objects, constructors and destructors, passing objects as parameters, class inheritance, inline functions, function and operator overloading and object I/O.
Prerequisite(s): CSD 105
Lab fee: $10

CSD 220 Systems Analysis (4)
Integration of principles from management information systems theory and data processing to identify managerial information needs. Development of systems to provide that

information. Topics include: information gathering tools and techniques, analysis tools and techniques, and project management tools and techniques. A structured approach to development of information systems.
Prerequisite(s): CSD 111
Lab fee: $10

CSD 222 Systems Design (4)
Design of computer-based information system. 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: $10

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: $10

CSD 231 Web Development I (4)
Stages of development and decisions to be made in creating an effective web site. Continuous project incorporates planning, idea generation, implementation and maintenance.
Prerequisite(s): CSD 160, ITS 12H or instructor permission
Lab fee: $10

CSD 232 Web Development II (4)
Overview of theory, tools, and techniques for integrating graphics, text, and video into a web page. Creation of a web page and site. Practical, hands-on approach. Insight into the unique opportunities presented in the integration of various types of media.
Prerequisite(s): CSD 231
Lab fee: $10

CSD 233 Web Development III (4)
Overview of theory, tools, and techniques used in developing an e-commerce web-site. Creation of Web pages and an e-commerce web-site. Enhancement of techniques learned in Web Development II.
Prerequisite(s): CSD 232
Lab fee: $10

CSD 262 Introduction to Object-Oriented COBOL (4)
Object-Oriented (OO) COBOL classes, object analysis and object design concepts for the web.
Prerequisite(s): CSD 105

CSD 290 Advanced Topics in Computer Software Development (3)
State-of-the-art technologies used in developing information systems for competitive advantage. Practical implementation of decentralized and right-sized information systems. Open systems, object orientation, graphical user interface, etc., as applied to business process re-engineering.
Prerequisite(s): CSD 222; and CSD 113 or CSD 232
Lab fee: $10

(DAN) Dance

DAN 100 Beginning Dance (1)
To introduce the students to basic dance technique incorporating anatomical and alignment principles that increase overall physical awareness.

DAN 111 Ballet I (3)
Basic fundamentals and theory of classical ballet for beginning students. Barre work, center combinations, and traveling sequences.

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 Ballet III (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, DAN112

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.

DAN 121 Modern Dance II (3)
Basic movement principles using modern dance techniques. Barre work, center floor work and locomotor patterns. Basic awareness of artistic aspects of dance performance.
Prerequisite(s): DAN 120

DAN 122 Modern Dance III (3)
Continued development of movement principles using modern dance technique. Increased awareness of modern dance pioneers. Barre work, center floor work, and locomotor patterns.
Prerequisite(s): DAN 120, DAN 121

DAN 130 Jazz Dance I (3)
Basic fundamentals of jazz technique. Warm-up, simple jazz style exercises, isolations, movement dynamics, basic dance fundamentals, and vocabulary in the jazz idiom.

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.

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,

DAN 211 Ballet IV (3)
Continuation of classical ballet technique. More complex sequences and vocabulary. Understanding of cultural and stylistic periods of ballet. Barre, center floor, and traveling sequences each class.
Prerequisite(s): DAN111, DAN 112, DAN113

DAN 212 Ballet V (3)
Continuation of classical ballet techniques. More complex sequences and vocabulary. Understanding of cultural and stylistic periods of ballet. Barre, center floor, and traveling sequences each class.
Prerequisite(s): DAN 111, DAN 112, DAN 113, DAN 211

DAN 213 Ballet VI (3)
Continuation of classical ballet technique. Increased complexity of movement sequences. Continued knowledge of ballet periods and styles. Barre, center floor, and traveling sequences each class.
Prerequisite(s): DAN111, DAN112, DAN113, DAN211, DAN 212

DAN 220 Modern Dance IV (3)
Application of movement principles in more complex movement patterns. Center floor and traveling movement sequences. First course of three-quarter sequence in second year modern dance.
Prerequisite(s): DAN 120, DAN 121, DAN 122

DAN 221 Modern Dance V (3)
Further application of more complex movement patterns involving movement principles. Center floor and traveling movement sequences. Diversity of dance settings. Second course in three quarter sequence of second-year modern dance.
Prerequisite(s): DAN 120, DAN 121, DAN 122, DAN 220

DAN 222 Modern Dance VI (3)
Increased complexity of modern dance movement patterns. Center floor and traveling movement sequences. Diversity of dance settings. Third course of a three-quarter sequence of second year modern dance.
Prerequisite(s): DAN 120, DAN121, DAN122, DAN 220, DAN 221

(DEV) Developmental
(See page 120 for an explanation of developmental courses.)

DEV 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

DEV 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 DEV 061

DEV 071 Writing Fundamentals (4)
Developmental writing 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

DEV 072 Writing Fundamentals Module A (1)
Focuses on the mechanics of writing using proper punctuation. Entrance to this course is based on the placement test. Institutional credit only.

DEV 073 Writing Fundamentals Module B (1)
Focuses on sentence structure (comma splices, fragment, run-ons, wordiness). Entrance to this course is based on the placement test. Institutional credit only.

DEV 074 Writing Fundamentals Module C (1)
Focuses on the essential elements of paragraph development. Topic sentences, development of ideas, and conclusions

will be covered. Entrance to this course is based on the placement test. Institutional credit only.

DEV 075 Writing Fundamentals Module D (1)
Focuses on rhetorics and the introduction of the essay. Entrance to this course is based on the placement test. Institutional credit only.

DEV 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

DEV 092 Match Fundamentals Module A (1)
Focuses on the operations with whole numbers. Entrance to this course is based on the placement test. Institutional credit only.

DEV 093 Math Fundamentals Module B (1)
Focuses on the operations with fractions. Entrance to this course is based on the placement test. Institutional credit only.

DEV 094 Math Fundamentals Module C (1)
Focuses on the operations with decimals. Entrance to this course is based on the placement test. Institutional credit only.

DEV 095 Math Fundamentals Module D (1)
Focuses on metric conversions. Entrance to this course is based on the placement test. Institutional credit only.

DEV 096 Math Fundamentals Module E (1)
Focuses on ratios and proportions. Entrance to this course is based on the placement test. Institutional credit only.

DEV 097 Math Fundamentals Module F (1)
Focuses on percentages. Entrance to this course is based on the placement test. Institutional credit only.

DEV 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 or Math Fundamentals DEV 091

DEV 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 or DEV 101

DEV 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 or DEV 102

(DFT) Drafting

DFT 101 Drafting I (3)
Instruments and their uses, lettering, dimensioning, geometrical construction, sketching and orthographic drawing.
Lab fee: $10

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 ASMEY 14.100.
Prerequisite(s): DFT 101 or 2 years high school drafting
Lab fee: $10

DFT 103 Descriptive Geometry (4)
Use of a CAD system to create two dimensional graphic representations of points, lines and planes in three-dimensional space with practical applications to locate and determine true lengths of lines, true shapes of surfaces and planes, intersections of surfaces, angles between planes, shades/shadows and perspectives.
Prerequisite(s): DFT 102, DFT 211 and ENT 101
Lab fee: $15

DFT 203 Technical Publication (4)
Graphic communication with computer methods of drawing construction. Isometric, one point and two point perspective techniques used to construct part, exploded, and sectioned assembly drawings. Drawings merged into a desktop publishing program for the addition of notes, assembly/repair instructions and specifications for the preparation of assembly and repair manuals.
Prerequisite(s): DFT 214, ENG 223
Lab fee: $15

DFT 211 Computer-Aided Design I (4)
Microcomputer system with Windows and AutoCAD software to construct two-dimensional mechanical drawings. Use of Windows and AutoCAD commands to produce drawings and fully dimension them according to ANSI standards. Drawings plotted fullsize and at scale as required.
Prerequisite(s): DFT 101 or two years high school drafting, ENT 121
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 or DFT 104
Lab fee: $15

DFT 214 AutoCAD Solids (4)
The use of Windows version AutoCAD software with microcomputer systems to generate three-dimensional wire frame drawings with surfaces, three-dimensional wire frame drawings with surfaces, three-dimensional solids, use cut planes to develop sectional views and determine properties such as mass, volume and center of moments.
Prerequisite(s): DFT 212
Lab fee: $15

DFT 215 AutoLISP (3)
The use of Windows version of AutoCAD software with microcomputer systems to write AutoLISP programs to automate the drafting and design process. Increasing productivity using AutoLISP to eliminate excessive numbers of drafting steps, make global drawing changes and simplify drafting of similar parts.
Prerequisite(s): DFT 212

DFT 220 CAD for Architecture (4)
CAD for architectural design and drafting. Research, preliminary design, formal presentation drawings, model building and design projects. Productions of working drawings, site plans, floor plans, elevations, sections and details.
Prerequisite(s): CET 203, DFT 211

DFT 250 AutoCAD Level 1 Certification Review (2)
Review of AutoCAD basic skills to prepare students for assessment by internationally recognized AutoCAD Release 14 Level I certification exam. Topics include 2D entity construction, hatching, modify, inquiry commands, and dimensioning. Pretest diagnostic, basic AutoCAD skills practice, and timed practices. Graded S/U.
Prerequisite(s): DFT 211 and DFT 212 or equivalent work experience
Lab fee: $10

DFT 251 AutoCAD Level II Certification Review (2)
Review of AutoCAD basic skills to prepare students for assessment by internationally recognized AutoCAD Release 13 Level II certification exam. Use Mline, create user coordinate systems, use external references, create and modify paper/model space view ports, modify system variables, apply grips to drawing editing, create and edit regions, create dimension styles, load LISP and ADS routines, and apply attributes to blocks and extract data. Pretest diagnostic, Advanced AutoCAD skills practice, an timed practices. Graded S/U.
Lab fee: $10

(EBE) Experience-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.
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 6 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.
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.
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.
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.
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.
Prerequisite(s): EBE 282 or EBE 283 or EBE 284 and approved co-op placement
Corequisite(s): EBE 297

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.
Prerequisite(s): EBE 282 or EBE 283 or EBE 284 and approved co-op placement

EBE 294 Co-Op Education II (4)
Continuation of valuable work experience. In addition to requirements of EBE284, a special project is required based on the technology.
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 theory and practice to the work environment.
Corequisite(s): EBE 292

(ECE) Early Childhood Education

ECE 100 Introduction to Early Childhood Education (3)
An introduction to the historical development of early childhood education, types of programs, the physical environment, educational theory, and the development of the child.
Lab fee: $20

ECE 110 Infant/Toddler Education (3)
Infant and toddler developmental milestones, appropriate environment for stimulation and learning, educational theory concerning the first two years of life, health and safety aspects of group care for infants and toddlers.
Prerequisite(s): ECE 100
Lab fee: $20

ECE 112 Resources in Early Childhood Education (4)
Making teaching materials and audiovisuals; using technology in the early childhood classroom; planning activities, classroom arrangements and outdoor play areas; becoming aware of free and inexpensive materials, cost and storage, and professional organizations.
Lab fee: $20

ECE 114 Art, Music and the Child (3)
Creativity of the child in art, music, movement. Resources for developing and implementing curriculum.
Lab fee: $20

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): ECE 110, ECE 100
Lab fee: $20

ECE 210 Children's Literature (3)
This course is a comprehensive study of children's literature and how to use it effectively with young children from birth to age eight based on NAEYC's developmentally appropriate practice of literacy experiences. This course is designed to expose students to many titles of award winning children's literature and teach basic book handling skills.

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/school-age child.
Prerequisite(s): ECE 110, ECE 100

ECE 213 Health, Safety and Nutrition (3)
Role of the teacher in preventing accidents; providing and maintaining a safe, healthy environment; childhood diseases, nutrition, curriculum, and parent communication.
Prerequisite(s): ECE 100, ECE 110
Lab fee: $20

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 100, ECE 112
Lab fee: $20

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 110

ECE 220 Early Literacy Development - Session A (3)
In this course the student will discover the research-based principles and practices for providing children birth through age 6 a strong foundation in early reading and writing within a developmentally appropriate approach, and prepare current or future early childhood teachers and caregivers to enhance the early literacy outcomes of young children.
Prerequisite(s): ECE 100, ECE 110
Lab fee: $20

ECE 221 Early Literacy Development - Session B (3)
In this course the student will discover the research-based principles and practices for providing children birth through age 6 a strong foundation in early reading and writing within a developmentally appropriate approach, and prepare current or future early childhood teachers and caregivers to enhance the early literacy outcomes of young children.
Prerequisite(s): ECE 100, ECE 110
Lab fee: $20

ECE 222 Early Literacy Development - Session C (3)
In this course the student will discover the research-based principles and practices for providing children birth through age 6 a strong foundation in early reading and writing within a developmentally appropriate approach, and prepare current or future early childhood teachers and caregivers to enhance the early literacy outcomes of young children.
Prerequisite(s): ECE 100, ECE 110
Lab fee: $20

ECE 223 Preschool Curriculum (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 114
Lab fee: $20

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: $20

ECE 225 Professional, Legal, Ethical Issues (2)
Issues, educational programs concerning the child, parent, teacher, administrator, including legal aspects, ethics, and the future of early childhood education.
Lab fee: $20

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 271, ECE 291
Lab fee: $20

ECE 250 Behavior Management of Children (3)
An approach to discipline that is positive, preventive, and developmentally appropriate for the early childhood age group.
Prerequisite(s): ECE 110

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 112, ECE 114, ECE 120
Corequisite(s): ECE 291
Lab fee: $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 100, ECE 110, ECE 112, ECE 114, ECE 120, PSY 221
Corequisite(s): ECE 292
Lab fee: $20

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.
Corequisite(s): ECE 293

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: $20

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: $20

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.
Corequisite(s): 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.)

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.

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.

ECO 250 Comparative Political Economy (3)
Examination of political processes and economic systems of the world with special attention to contemporary issues.

(EMS) Emergency Medical Services

EMS 101 Paramedic Theory/Practice I (7)
Introduction to emergency medical services advanced life support following the EMT-Intermediate national standard training curricula and Division I, II, and III of the EMT-Paramedic national standard training curricula. Includes prehospital environment, an overview of roles and responsibilities, EMS systems, medical/legal aspects, communications, rescue operations, major incident response, stress management in emergency services, advanced patient assessment, advanced airway management, IV therapy and shock resuscitation, emergency pharmacology, trauma and burn emergencies. Includes college practical skills laboratory.
Prerequisite(s): Ohio EMT Basic Certification, BIO 102, BIO 105
Corequisite(s): EMS 112
Lab fee: $65

EMS 102 Paramedic Theory/Practice II (7)
Applies Paramedic Theory/Practice I. Integrates Division IV, of the EMT-Paramedic national standard training curricula. Division IV: respiratory disorders, cardiovascular emergencies, diabetic emergencies, nervous system disorders. Includes college practical skills laboratory.
Prerequisite(s): EMS 101, EMS 112
Corequisite(s): EMS 114, EMS 120
Lab fee: $50

EMS 105 Paramedic Theory/Practice III (6)
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
Lab fee: $30

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

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 prehospital trauma skills.
Prerequisite(s): EMS 101, EMS 112
Corequisite(s): EMS 102

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, prehospital 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 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

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 team.
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.
Lab fee: $10

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 card 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 prehospital care including criminal and civil law with an emphasis to expand knowledge base. Case studies are presented.
Prerequisite(s): Any EMS Basic 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

EMS 288 Paramedic Theory/RNs (6)
National Standard Paramedic Curriculum six divisions including prehospital 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. Prerequisite: RN licensure, ACLS provider and entrance requirements mandated by accrediting agency. 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 2 years critical care, TNCC, Ohio EMT-Basic Certification
Lab fee: $60

(ENG) English

ENG 111 English I (4)
The process of writing personal essays; modes of writing; language issues; and library skills.
Prerequisite(s): appropriate score on placement test or successful completion of required DEV classes

ENG 112 English II (4)
Critical thinking, persuasive writing, research skills, and literary analysis.
Prerequisite(s): ENG 111

ENG 130 Introduction to Literature (3)
Critical readings, discussion, and analysis of poetry, short story, and drama.

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 system of another culture in terms of how these variables influence on-job communication preferences and expectations.
Prerequisite(s): ENG 112, ENG 111 (Recommended: ITS 12W or basic word processing and keyboarding skills)

ENG 225 Creative Writing (3)
A practical introduction to the three major literary genres: fiction, poetry and drama. Discussion topics include the basic elements of the three forms. Writing projects include a collection of poems, short & long fiction and a one-act script, screen play or play.

ENG 227 Intermediate Composition (3)
Critical thinking and writing fundamentals, conventions and forms of informative writing, persuasive and informative strategies, practice in advanced writing skills.
Prerequisite(s): ENG 111, ENG 112

ENG 230 Great Books: Literature (3)
Chronological selection of the major works and periods of world literature beginning with the ancients and progressing through the Middle Ages, Romanticism, Realism, and Modernism.

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 literary techniques; explication and interpretation.

ENG 243 Fiction (3)
Critical reading, discussion, and analysis of short stories and novels.

ENG 245 Drama (3)
Study and analysis of plays from different historical periods.

ENG 250 American Literature (3)
Themes, ideas and periods in American literature from its beginning through modern times including selections from Twain, Hawthorne, Poe, Thereau, Whitman, Dickson, Eliot, Frost, Wright, and Morrison.

ENG 261 British Literature to 1700 (3)
Survey of the major works and periods of British literature including selections from Beowulf, Medieval narratives and lyrics, Langland, Chaucer, Malory, More, Wyatt, Surrey, Sidney, Spenser, Shakespeare, Donne, Dryden, Milton.

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 with selections from Swift, Pope, Johnson, Wordsworth, Keats, Austen, Dickens, Blake, Coleridge, Hardy, Joyce, Eliot, Woolf, Shaw, Yeats, Beckett.

(ENT) Engineering Technology

ENT 101 Engineering Methods (3)
Engineering Technology as a profession. Dimensions, units, significant figures, simple trigonometry and vectors. Use of scientific calculators.
Corequisite(s): DEV 102 or higher math placement

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.
Corequisite(s): DEV 102 or higher math placement
Lab fee: $10

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.
Lab fee: $10

ENT 205 Circuits and Machines (4)
Direct and alternating current circuits, generators and motors; batteries; magnetism; electromagnetic induction; single and three-phase electric circuits; transformers and regulators, laboratory experiments and demonstrations.
Prerequisite(s): MTH 140, ENT 101
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, inferences bout variance, components of variance, crossed and nested experiments, individual effects and regression analysis.
Prerequisite(s): ENT 101, MTH 121
Lab fee: $10

ENT 212 Finite Element Modeling (4)
Modeling software applications of finite element thermal problems. Emphasis on analysis of forces acting on rigid bodies at rest, vector forces, trusses and frames.
Prerequisite(s): DFT 214, ENT 111, ENT 120, MET 211
Lab fee: $20

(EXS) Exercise Science

EXS 110 Introduction to Physical Fitness (3)
Historical development of health and fitness centers; overview of roles and careers in the fitness field; ethical issues; client demographics; resources for fitness programming.
Lab fee: $6

EXS 114 Health and Health Emergencies (3)
Consideration of selected health conditions and issues; recognition of health emergencies; demonstration of assistive measures.
Prerequisite(s): BIO 102, BIO 121
Lab fee: $10

EXS 116 Care of Athletic Injuries (3)
Recognition, treatment, management, and prevention of athletic injuries. Basic taping and treatment procedures. Scope of responsibilities and certification requirements specified by NATA.
Lab fee: $10

EXS 117 Weight Training Methods (2)
Principles and methods of weight training; lifting techniques; use and maintenance of equipment; designing appropriate programs for clients; risk management.
Prerequisite(s): EXS 114, BIO 121

EXS 119 Math for Fitness Professionals (2)
Understand and apply mathematical concepts associated with the cardiovascular performance and profession
Prerequisite(s): DEV 091 or appropriate score on placement test, EXS 110

EXS 123 Aerobic Fitness Methods (2)
Introduction to wellness, fitness and lifestyle management; including basic principles of physical fitness, putting together a complete fitness program, cardiovascular health, weight management and stress management. Self tests.
Prerequisite(s): EXS 114

EXS 201 EKG Skills (2)
Beginning skills in 12 lead technology. Recognize basic cardiac rhythms and EKG abnormalities.
Prerequisite(s): Instructor permission
Lab fee: $10

EXS 210 Nutrition and Sport (3)
Knowledge of basic nutritional needs and modifications during athletic training and competition; identification of healthful practices, nutritional problems, risky behaviors and consequences.
Prerequisite(s): BIO 123

EXS 212 Introduction to Exercise Testing and Prescription (4)
Methods and procedures for exercise testing including cardiovascular assessment, body composition testing, muscular strength and endurance testing, tolerance testing, basic electrocardiography interpretation and metabolic responses to exercise. These outcomes applied to principles of physical training and conditioning and individualized exercise programs.
Prerequisite(s): BIO 123, BIO 210, EXS 114, EXS 119
Lab fee: $10

EXS 215 Fitness and Special Populations (2)
Adaptations of training principles and program prescription for various age groups, clients with physical and mental disabilities, chronic illness, or pregnancy. Legal parameters, safety precautions, and equipment needs.
Prerequisite(s): BIO 123, BIO 210

EXS 218 Management of Facilities and Programs (3)
Organization and administration of facilities. Management concepts, policy development, budgeting, personnel, activity programming, equipment selection and maintenance, activity selection, and evaluation.
Prerequisite(s): Instructor permission

EXS 220 Fitness Issues: Professional and Legal (3)
Legal issues in fitness environments; overview of contractual agreements; ethical issues, professional organizations and roles; certification.
Prerequisite(s): EXS 110, EXS 212

EXS 225 Biomechanics of Exercise (4)
Study of forces and their effects on humans in exercise and sport.
Prerequisite(s): BIO 118, BIO 123, BIO 210

EXS 233 Aquatics Management/Court Sports (2)
Rules for licensure of pools; filtration systems and maintenance; staffing requirements and training of personnel; tennis and racquetball.
Prerequisite(s): BIO 123, EXS 114, EXS 220
Lab fee: $15

EXS 240 Fitness Instruction (3)
Course planning, program administration, instructional methods and styles, motivation, problem solving, evaluation; laboratory experience.
Prerequisite(s): BIO 210, EXS 114
Lab fee: $5

EXS 281 Practicum I (2)
Supervised experience in a fitness facility.
Prerequisite(s): Instructor permission

EXS 282 Practicum II (2)
Continuation of EXS 281. Supervised experience in a fitness facility.
Prerequisite(s): EXS 281
Corequisite(s): EXS 292

EXS 291 Seminar I (1)
Analysis of experiences gained and problems encountered in Practicum I; documentation.
Prerequisite(s): Instructor permission
Corequisite(s): EXS 281

EXS 292 Seminar II (1)
Analysis of experiences gained and problems encountered in Practicum II; documentation.
Prerequisite(s): EXS 281, EXS 291
Corequisite(s): EXS 282

(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.

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

FRN 211 French IV (4)
French culture, grammar review, reading and discussion of selected texts with practice in speaking and writing the language.
Prerequisite(s): FRN 113

FRN 212 French V (4)
French culture, grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.
Prerequisite(s): FRN 211

(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.

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.

(GER) German

GER 111 German I (4)
Study of the vocabulary and structure of the German language; practice in conversation, reading, writing. German culture.

GER 112 German II (4)
Study of the vocabulary and structure of the German language; practice in conversation, reading, and writing. German culture.
Prerequisite(s): GER 111

GER 113 German III (4)
Study of the vocabulary and the structure of the German language; practice in conversation, reading, and writing. German culture.
Prerequisite(s): GER 112

GER 211 German IV (4)
Grammar review, reading, and discussion of selected texts with practice in speaking and in writing the language. German culture.
Prerequisite(s): GER 113

GER 212 German V (4)
Grammar review, reading , speaking, and discussion of selected texts with practice in speaking and writing the language. German culture.
Prerequisite(s): GER 211

(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.
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.
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): GLG 111
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.
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: $40

GLG 121 Meteorology: Introduction to the Atmospheric Sciences (4)
Become familiar with the atmospheric sciences and its effect on other Earth systems. Recognize and become familiar with atmospheric terminology, weather concepts, weather mapping and forecasting, and weather patterns.
Lab fee: $40

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

(GPH) Graphic Design

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.
Lab fee: $10

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.
Lab fee: $10

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: $10

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: $10

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: $10

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: $10

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: $10

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: $10

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: $10

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 three 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.
Prerequisite(s): ART 113

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): GPH 203, GPH 212

GPH 250 Professional Development (5)
Life, career and educational goals; job search documents; researching an organization, interviewing skills, and professional image. Development of an individual portfolio of graphic design pieces; methods of self-promotion for purposes of seeking employment and free-lance work. Review of portfolio by a professional. Use of QuarkXpress, Adobe Photoshop, Adobe Illustrator
Prerequisite(s): GPH 120, GPH, 202, GPH 211, PHL 220
Corequisite(s): GPH 212
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 250

(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 religion and science; the functions of language in theistic religion and science; naturalism and supernaturalism; falsificationism; miracles, cosmology and creation; and creation and evolution.
Prerequisite(s): A minimum GPA of 3.25 and successful completion of ENG 112 or instructor permission

(HST) History

HST 111 Western Civilization To the 14th Century (3)
History of western society from earliest times to the 14th century. Social, political, economic, and cultural aspects of the ancient and medieval eras.

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.

HST 113 Western Civilization from 19th Century to the Present (3)
History of western society from 1815 to the present. Nationalism, revolution, the new industrialism, socialism, colonialism, imperialism, and 20th-century developments.

HST 121 American History to 1810 (3)
American history from the colonization to the Jeffersonian period including political, social, and economic history.

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 of the United States.

HST 123 American History 1900-Present (3)
American history of the United States in the 20th century. Political, social, and economic history, concluding with a review of current events.

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): College level American History course recommended

(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 diciplines including the natural sciences, sociology, psychology, mathematics, literature, history, theatre, religion, and philosophy; course content will vary.
Prerequisite(s): A minimum of 60 credit hours earned

(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). Lubriciation techniques, hand tools, drill press, shop press, dial indicators and gage blocks.

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.
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): DEV 091 or placement test

INT 120 Fluid Power I (4)
Components and principles utilized in industrial hydraulic and pneumatic circuits. Schematics for fluid systems, component operation, troubleshooting techniques and basic calculations for the design and troubleshooting of systems.
Lab fee: $15

INT 125 Fluid Power II (4)
Application of hydraulic systems. Connection and operation of circuits utilizing cylinders, valves, hydraulic motors and other components. Control of hydraulic circuits using electrical and pneumatic circuits. Application of electronic sensors to fluid power systems. Principles of vacuum systems.
Prerequisite(s): INT 120
Lab fee: $20

INT 140 Industrial Safety (2)
An introduction to industrial regulatory safety terminology and requirements.

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.
Lab fee: $15

INT 155 Motors and Motor Controls (4)
Alternating and direct current motors. Speed, torque and power and their effects on motor performance. 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.
Prerequisite(s): INT 150
Lab fee: $15

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.
Lab fee: $15

INT 250 Programmable Logic Controllers (3)
Control of processes using Programmable Logic Controllers (PLC's). Programming, connecting, and testing PLC's. Interfacing with sensors, application of PLC's into a variety of process applications. Utilization of a hand-held programmer in troubleshooting PLC's.
Prerequisite(s): INT 150 or instructor permission
Lab fee: $10

INT 252 Automated Systems (4)
Fixed automation using transfer lines controlled by relay logic and flexible automation using Programmable Logic Controllers, robots, Computer Numerical Control tools, conveyors, Automatic Storage/Retrieval System and Automatic Guided Vehicles. Computer integration of the above components.
Prerequisite(s): INT 250
Lab fee: $20

INT 255 Electrical Troubleshooting (4)
Maintenance and troubleshooting of motors, solenoids, electrical controls, Programmable Logic Controllers, electrical distribution and sensors using common testing equipment. Problems at the component, machine, and inter-machine levels.
Prerequisite(s): INT 250
Lab fee: $15

INT 260 Electrical Distribution (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
Lab fee: $20

INT 270 Industrial Machine Maintenance (4)
Troubleshooting and maintenance of the machine and system levels. Manufacturer's documentation and maintenance logs. Introduction to planned and predictive maintenance. Troubleshooting charts and efficient sequence for failure analysis.
Prerequisite(s): INT 155, INT 170, INT 255
Lab fee: $20

INT 280 Industrial Technology Projects (4)
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.
Prerequisite(s): INT 255
Lab fee: $20

(ITS) Information Technology Systems

ITS 080 Computer Fundamentals (1)
Fundamental concepts of computers, operating systems, and network usage. Experience with basic wordprocessing, spreadsheet, database, and graphic programs. Preparatory course for students with little or no computer background.

ITS 12A Windows Concepts (2)
Familiarization with the mouse and a graphical operating environment. Topics include all major aspects of MicroSoft Windows. Knowledge of a personal computer keyboard and basic DOS commands strongly recommended.
Prerequisite(s): Computer knowledge level equivalent to ITS 080.

ITS 12D Beginning Database (1)
Basic database manipulation (e.g. creating, updating, and generating reports) via packaged software. 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.

ITS 12H Beginning HTML (2)
Step-by-step approach to learning HTML. Topics include: creating a web page using HTML, formatting the page, adding graphics, and managing the web site.
Prerequisite(s): ITS 12A or instructor permission

ITS 12P Beginning Presentation Graphics (1)
Techniques of visual presentation development via the use of a presentation software package.
Prerequisite(s): Computer knowledge level equivalent to ITS 080.

ITS 12S Beginning Spreadsheet (1)
Basic creation and manipulation of data within an electronic spreadsheet. 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.)
Prerequisite(s): Computer knowledge level equivalent to ITS 080.

ITS 12W Beginning Word Processing (1)
Basic creation and editing of documents using packaged word processing software. 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 skill, may be substituted for ITS 12W.
Prerequisite(s): Computer knowledge level equivalent to ITS 080.

ITS 14A Intermediate Windows Concepts (2)
Using troubleshooting tools, working with DOS applications, customizing the system, installing hardware/software, file and system maintenance, GUI accessories.
Prerequisite(s): ITS 12A

ITS 14D Intermediate Database (2)
Intermediate database manipulation techniques using packaged software (i.e., 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.
Prerequisite(s): ITS 12P or instructor permission

ITS 14S Intermediate Spreadsheet (2)
Intermediate spreadsheet manipulation techniques using packaged software (i.e., 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.
Prerequisite(s): ITS 12W, ITS 102, or ITS 103

ITS 101 Using the Internet/Web Development (4)
Creating and editing pages for the WWW using various software packages including Dreamweaver.
Prerequisite(s): ITS 103

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.

ITS 103 Information Technology Basics (3)
A brief overview of Windows or current GUI, basic but essential word processing concepts, electronic mail, WWW research techniques, OhioLINK. Students with little or no keyboarding experience should expect to take longer to complete assignments.
Prerequisite(s): Computer knowledge level equivalent to ITS 080.

(LPN) Practical Nursing

LPN 106 Nutrition (1)
An introduction to the basic principles of nutrition.
Prerequisite(s): Acceptance into the LPN program

LPN 107 Diet Therapy (1)
Dietary treatment of common disease conditions.
Prerequisite(s): Acceptance into the LPN program
Corequisite(s): LPN 106

LPN 125 Introduction to Disease Processes (4)
Basic principles of microbiology, signs and symptoms of common disease/conditions of each body system, diagnostic tests, treatment and principles of nursing care.
Prerequisite(s): BIO 102
Corequisite(s): BIO 105

LPN 130 Nursing Trends I (2)
Ethical and legal dimensions of practical nursing practice. Historical perspectives on practical nurses and nursing organizations.
Prerequisite(s): Acceptance into the LPN program
Lab fee: $6

LPN 133 Nursing Trends II (2)
Identifies career concerns and opportunities for practical nurses.
Prerequisite(s): LPN 130, LPN 145, LPN 164, LPN 181, LPN 185
Corequisite(s): LPN 190

LPN 145 Pharmacology (3)
Drug classifications, uses, actions, usual dose, route of administration, side effects and drug interactions.
Prerequisite(s): BIO 105, LPN 106, LPN 107, LPN 125, LPN 160, NUR 114, PSY 221
Corequisite(s): LPN 164, LPN 181, LPN 185

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, LPN 106, LPN 107,MST 181 or equivalent, PSY 221
Corequisite(s): BIO 105, LPN 125, NUR 114
Lab fee: $50

LPN 164 Fundamentals of Nursing II (6)
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.
Prerequisite(s): BIO 105, LPN 125, LPN 130, LPN 160, NUR 114
Corequisite(s): LPN 145, LPN 181, LPN 185
Lab fee: $50

LPN 181 Obstetrical Nursing Theory (2)
Nursing care of mothers during pregnancy, delivery, puerperium and care of the newborn, with emphasis on common health problems of mothers and newborns.
Prerequisite(s): BIO 105, LPN 125, LPN 130, LPN 160, NUR 114
Corequisite(s): LPN 145, LPN 164, LPN 185

LPN 185 Pediatric Nursing (5)
Family centered approach to meeting the needs of the pediatric client; application of the nursing process, role of the nurse in the care of the infant/child with common diseases/conditions.
Prerequisite(s): BIO 105,LPN 125, LPN 130, LPN 160, NUR 114
Corequisite(s): LPN 145, LPN 164, LPN 181

LPN 190 Medical-Surgical Nursing (14)
Application of the nursing process while providing nursing care for adult clients with common medical conditions; study and care of the surgical patient from admission through discharge from the hospital; hospital and long-term care settings. Preceptorship experience for two weeks assigned with a licensed or registered nurse.
Prerequisite(s): LPN 145, LPN 164, LPN 181, LPN 185
Corequisite(s): LPN 133
Lab fee: $50

(MAT) Manufacturing Engineering Technology

MAT 110 Manufacturing Processes (3)
Detailed overview of manufacturing processes including machine tool operations, metal forming, welding processes and casting.
Prerequisite(s): DFT 101 or two years high school drafting

MAT 111 Manufacturing Laboratory (2)
Set-up and operation of lathes, mills, drills, band saws, and grinders. Competency-based course requiring completion of several machining of projects of increasing complexity. Safety, care, and use of equipment, use of machinists' references and inspection instruments.
Prerequisite(s): DFT 101, QET 101
Corequisite(s): MAT 110
Lab fee: $25

MAT 112 Metal Fabrication (4)
Metal Fabrication with emphasis on angle, bar, plate & sheet stock. Pattern development and fabrication of projects using slip rolls, sheet metal brake, iron worker and angle rolls.
Prerequisite(s): DFT 101 or INT 105, QET 101
Lab fee: $50

MAT 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

MAT 222 Computer-Aided Manufacturing (4)
Application of procedures for CNC automatic tool changing on a lathe. NC and CNC programming concepts for complex parts on a computer controlled mill.
Prerequisite(s): MAT 221

(MET)Mechanical Engineering Technology

MET 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

MET 212 Dynamics (3)
Motion and the effects of forces acting on rigid bodies; rotational and translational motion; linear and angular accelerations; plane motion; work, torque, energy, power, impulse, and momentum.
Prerequisite(s): MET 211

MET 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 connections.
Prerequisite(s): MET 211

MET 231 Basic Fluid Mechanics (4)
Fundamental properties of fluids, hydrostatics, fluid flow and energy, viscosity and losses, flow in pipe systems and open channels, forces due to fluid motion and forces on immersed bodies.
Prerequisite(s): ENT 101, MTH 140, PHY 111

MET 241 Automation and Robotics (4)
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): ENT 101, ENT 205
Lab fee: $10

MET 251 Machine Design (4)
A course designed to develop an analytical ability to solve problems in proportioning various parts of machines. Integrates the mathematics, statistics, dynamics, material strengths and properties of materials studied in previous courses. Problem solving involving force and motions; power transmissions; shafts; keys; pulleys and belts; gears; bearings; couplings; cylinders, welded and riveted; screws and fasteners; and springs.
Prerequisite(s): MAT 110, MET 213

MET 261 Applied Thermodynamics (4)
Applications of the first and second laws of thermodynamics, thermal properties of pure substances, vapor cycles, gas cycles, gas compression, refrigeration, heat transmission, and heat exchangers.
Prerequisite(s): ENT 101, MTH 121, PHY 112

(MLT) Medical Laboratory Technology

MLT 100 Med Lab Orientation (3)
History, role and professional responsibilities of the medical laboratory technician. Organization of the medical laboratory and principles of laboratory instrumentation; use and care of laboratory instruments; laboratory safety; medical terminology.
Corequisite(s): CHM 119

MLT 110 Routine Urinalysis (4)
Routine urinalysis techniques including physical and chemical characteristics and microscopic analysis of urinary sediment.
Prerequisite(s): BIO 122, BIO 134
Corequisite(s): BIO 123, CHM 131
Lab fee: $65

MLT 115 Phlebotomy (3)
Comprehensive background in the theory and principles of phlebotomy. Up-to-date practical instruction in phlebotomy procedures. Quality assurance and total quality management for laboratory practice.
Lab fee: $25

MLT 122 Hematology I (6)
The origin, formation and purpose of the formed elements of the blood, differential morphology and staining techniques.

Manual and automated instrumentation (COULTER COUNTER) techniques and principles of counting erythrocytes, leukocytes and platelets; determination of red cell indices. Quality control.
Prerequisite(s): Acceptance into MLT program
Corequisite(s): BIO 134
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): BIO 134, MLT 115
Corequisite(s): MLT 191

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.
Corequisite(s): MLT 181

MLT 221 Hematology II (5)
Disorders of blood cells and platelets including biochemistry of the red blood cell, anemias, leukemias. Principles and procedures of coagulation.
Prerequisite(s): MLT 121
Corequisite(s): MLT 230, MLT 271
Lab fee: $65

MLT 251 Immunohematology (8)
Responsibility of blood bank work, blood collection and processing. Genotypes and phenotypes of ABO and Rh blood group systems. Typing techniques, principles, procedures; crossmatch and panel screening; atypical antibody identification and quality control.
Prerequisite(s): BIO 233
Corequisite(s): MLT 270, MLT 221
Lab fee: $85

MLT 270 MLT Review & Update (4)
Review and update of: urinalysis, hematology, clinical chemistry, medical microbiology, immunology, immunohematology.
Prerequisite(s): All coursework leading to an MLT (CLT) degree.

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
Lab fee: $10

(MST) Multi-Skilled Health Care

MST 101 Health Care in Changing Times (3)
Changes in health care institutions. Health care workers in various practice settings. Financing of health care in U.S., Canada, and Europe. Trend into the future.

MST 102 Infectious Processes and Health Care (1)
Prevention of HIV/AIDS infections in health care settings. Legalities regarding HIV status. Hepatitis B prevention.

MST 103 Health Systems Communication (2)
Oral communication with other health care workers. Therapeutic responses and communication with clients with disabilities. Communicating with visitors. Written communication.
Prerequisite(s): MST 181

MST 121 Gerontology: Health Issues (3)
Demographics of the aged, historical perspectives on gerontology, communication with older adults, normal and abnormal changes of aging, dysfunctional behaviors of older adults; elder abuse.

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.
Lab fee: $12

MST 182 Advanced Nursing Assistant Skills (4)
Theory and practice in performing nursing technician skills. Performance of skills which do not require sterile technique. Emphasis on safety, observation, and reporting.
Prerequisite(s): BIO 102, MST 181, MST 102, EMS 171
Corequisite(s): BIO 101, MST 121
Lab fee: $25

(MTH) Mathematics

MTH 101 Technical Mathematics Applications A (1)
An applications course for Engineering Technology students to supplement DEV 102. 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): DEV 101 or placement test score
Corequisite(s): 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): Three years high school math or DEV 103 or an appropriate 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 091

MTH 107 Technical Mathematics Applications B (1)
An applications course for Engineering Technology students to supplement MTH 121. Instruction in the use of scientific calculators and other technology. Topics include: scientific notation & significant figures, applied functional notation, geometry applications, graphing applications. Applications of linear & quadratic functions, and use of conic sections.
Prerequisite(s): DEV 102, MTH 101
Corequisite(s): MTH 120 or MTH 121
Lab fee: $10

MTH 108 Technical Mathematics Applications C (1)
An 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): DEV 102, MTH 101, MTH 107, MTH 120 or MTH 121
Corequisite(s): MTH 140
Lab fee: $10

MTH 109 Technical Mathematics Applications D (1)
An applications course for Engineering Technology students to supplement MTH 220. Use of the scientific calculator and other technology. Topics include: applications of functional notation, differentiation, differentials, and integration to engineering related situations.
Prerequisite(s): DEV 102, MTH 101, MTH 107, MTH 108, MTH 120 or MTH 121, MTH 140
Corequisite(s): MTH 220
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): DEV 103 or appropriate score on the math placement test.

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 MTH 121 College Algebra I, but this course will involve more in-class practice of important skills.
Prerequisite(s): DEV 103

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): DEV 103 or appropriate score on math placement test

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 appropriate score on the math placement test

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 appropriate score on the math placement test

MTH 220 Calculus for the Management, Life and Social Sciences (5)
Functions; limits; derivatives of polynomial, exponential, and logarithmic functions; integrals of polynomial, exponential, and logarithmic functions; maxima and minima; applications appropriate to biology, medicine, business, economics, social and behavioral sciences.
Prerequisite(s): MTH 120 or MTH 121 or appropriate score on the math placement test

MTH 221 Calculus I (5)
Functions, limits, continuity, differentiation of polynomial and trigonometric functions, applications of the derivative.
Prerequisite(s): MTH 122, MTH 140 or an appropriate score on the calculus placement test

MTH 222 Calculus II (5)
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 of integration.
Prerequisite(s): MTH 221

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.

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.
Lab fee: $15

MUS 160 Applied Voice (1)
Private voice instruction focusing on the fundamentals of voice production, song literature, interpretation and performance skills.
Lab fee: $50

(NTK) Network Administration

NTK 100 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. Part of a set of courses that cover material for the CCNA and Network+ certification exams.
Prerequisite(s): NTK 152 or instructor permission
Lab fee: $50

NTK 102 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. Part of a set of courses that cover material for the CCNA and Network+ certification exams.
Prerequisite(s): NTK 100
Lab fee: $50

NTK 104 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 covers material for the CCNA and Network+ certification exams.
Prerequisite(s): NTK 102
Lab fee: $50

NTK 120 Information Security I (5)
Overview of computer/information security concepts. Assessment, development, and implementation of security policies. Review of information/network security tools and resources.
Prerequisite(s): NTK 152
Lab fee: $50

NTK 122 Information Security II (5)
Advanced discussion of information security topics, including TCP/IP routing protocols, internetworking technologies, cryptology, firewalls, VPNs, encryption, and others. Hands-on use/review of computer security software.
Prerequisite(s): NTK 120
Lab fee: $50

NTK 130 Technical Support Systems (5)
Help desk tools and technologies. Support management and processes. Technical knowledge of Office 2000 from an installation and support standpoint. Application troubleshooting and problem solving. Resolving application printing problems.
Prerequisite(s): NTK 172
Lab fee: $50

NTK 152 Internet Technologies (5)
Introductory technical knowledge of Internet, Intranet and Extranet technologies. Internet basics, Internet clients, development, networking, security and business concepts. Basics of Domain Name Service (DNS), File Transfer Protocol (FTP), Hypertext Transfer Protocol (HTTP). Covers CompTIA's i-Net+certification requirements.
Prerequisite(s): Computer knowledge level equivalent to ITS 080
Lab fee: $50

NTK 154 Server Install and Configuration (5)
Hands-on experience in installing, configuring, managing and troubleshooting network server hardware and software. This course covers Server+ certification objectives.
Prerequisite(s): NTK 172
Lab fee: $50

NTK 172 PC Maintenance I (5)
Hands on experience in setting-up and configuring a variety of PC hardware and software. Computer disassembly and reassembly. First of two courses that cover material for CompTIA's at certfication exams.
Prerequisite(s): Computer knowledge level equivalent to ITS 080
Lab fee: $50

NTK 174 PC Maintenance II (5)
Hands-on experience installing and supporting various Microsoft Windows operating systems. Networking fundamentals and Internet concepts are explored. Second of two courses that cover material for CompTIA's at certfication exams.
Prerequisite(s): NTK 172
Lab fee: $50

NTK 240 Unix/Linux Administration I (5)
Discussion of the Unix/Linux file system. Maintenance tasks, customizing the GNOME interface, Linux commands. File access permissions, printing commands and utilities. Creating and managing user accounts. This course covers Linux Professional Institute (LPI) and Linux Certified Administrator (LCA) certification requirements.
Prerequisite(s): NTK 172
Lab fee: $50

NTK 250 Novell NetWare Administration (5)
Hands-on experience with Novell Netware operating system. You will learn how to accomplish fundamental network management tasks on a NetWare 5.1 network: 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): NTK 172 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 5.1 network. Advanced Novell NetWare 5.1 skills. Build a TCP/IP network. Build an Internet infrastructure. Manage and optimize Netware 5.1 and backup and restore. Covers Certified NetWare Engineer (CNE) certification requirements.
Prerequisite(s): NTK 250
Lab fee: $50

NTK 260 Windows 2000 Professional (5)
Hands-on experience with the Windows 2000 Professional operating system. Installing, configuring, optimizing and troubleshooting. Course covers Microsoft certification requirements.
Prerequisite(s): NTK 172 or permission of instructor
Lab fee: $50

NTK 262 Windows 2000 Server (5)
Hands-on experience with Windows 2000 Server Operating System. Planning, installing, configuring, managing, optimizing and troubleshooting. This course covers Microsoft certification requirements.
Prerequisite(s): NTK 260 or instructor permission
Lab fee: $50

NTK 264 Administering Windows 2000 Infrastructure (5)
Installing, managing, monitoring, configuring, and troubleshooting DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a Windows 2000 network infrastructure.
Prerequisite(s): NTK 260 or instructor permission
Corequisite(s): NTK262
Lab fee: $50

NTK 265 Designing Windows 2000 Infrastructure (5)
Analysis of business requirements for a network infrastructure. Design of a network infrastructure using Windows 2000 to meet business requirements.
Prerequisite(s): NTK 262 or instructor permission
Lab fee: $50

NTK 266 Administering Windows 2000 Directory Services (5)
Installing, configuring, and troubleshooting the components of Active Directory. Backing up and restoring Active Directory.
Prerequisite(s): NTK 262 or instructor permission
Lab fee: $50

NTK 267 Designing Windows 2000 Directory Services (5)
Analysis of business requirements and the design of a directory service architecture using Active Directory and Windows NT domains. Connectivity between and within systems and data replication.
Prerequisite(s): NTK 262 or instructor permission
Lab fee: $50

NTK 268 Designing Windows 2000 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.
Prerequisite(s): NTK 262 or instructor permission
Lab fee: $50

(NUR) Registered Nursing

NUR 114 Dosage Calculations I (1)
Systems of measurement and calculation of drug dosage.
Prerequisite(s): DEV 091 or satisfactory score on placement test

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 or equivalent
Corequisite(s): BIO 102, BIO 121, ITS 103, NUR 114
Lab fee: $66

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: $60

NUR 173 Nursing Transition (8)
Applies the nursing process in caring for the child and adult with various common health problems affecting the respiratory, musculo-skeletal, gastrointestinal, endocrine and cardiovascular systems. Examines ethical and legal issues as they apply. Role transition from LPN to RN integrated into clinical practice.
Prerequisite(s): BIO 123, BIO 131, ITS 103, NUR 114
Lab fee: $40

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 with clients of all age groups in acute and community settings. Emphasizes health promotion and emergency care concepts, care of clients with health care emergencies, and gynecologic, breast, immunologic, and pediatric cardiovascular 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, PSY 221
Corequisite(s): NUR 275
Lab fee: $15

NUR 275 Nursing V (5)
Application of the nursing process in meeting the mental health needs of clients and individuals. Utilization of therapeutic communication skills, 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, PSY 230
Corequisite(s): NUR 274
Lab fee: $10

NUR 276 Nursing VI (11)
Expands on concepts presented in Level I(NUR 170, NUR 171, NUR 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.
Prerequisite(s): BIO 123, BIO 131, NUR 172 or NUR 173, PSY 221,
Lab fee: $60

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: $40

(OAD) Office Administration

OAD 101 Document Formatting (5)
Introduction to formatting business correspondence, reports, and tables utilizing word processing software with emphasis on speed and accuracy. A minimum requirement of the course is two 5-minute timed writings at a C level (35-39 NWPM).
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 (5)
Mastery of producing business correspondence, tables, reports, and administrative and employment documents utilizing word processing software. Introduction to desktop publishing. Emphasis on speed and accuracy. A minimum requirement of the course is two 5-minute timed writings at a C level (45-49 NWPM).
Prerequisite(s): OAD 101 or proficiency test

OAD 103 Integrated Office Applications (4)
Production of business documents utilizing integrated software applications. A minimum requirement of the course is two 5-minute timed writings at a D level (50-54-NWPM).
Prerequisite(s): OAD 102

OAD 105 Business English (4)
A basic business English course covering the following: punctuation, sentence structure, capitalization, number usage, and possessives.

OAD 113 Applied Document Production (3)
Intense study of punctuation and grammar and intense typing practice for speed and accuracy.

OAD 124 Vocabulary/Reference Use (3)
Techniques for using the dictionary, library sources, prefixes, suffixes, and troublesome word endings as well as spelling rules.

OAD 130 Advanced Grammar & Proofreading (4)
Mastery of grammar and punctuation concepts and proofreading skills.
Prerequisite(s): OAD 105 or instructor permission

OAD 135 Office Procedures (4)
Basic office skills including communicating effectively, time management, processing mail, scheduling appointments, greeting visitors, making travel arrangements, planning meetings and conferences, and telephone techniques.
Prerequisite(s): OAD 130 or instructor permission

OAD 140 Records Management (3)
Basic principles and procedures of records storage, including alphabetic, geographic, numeric, and subject methods as well as records control, retrieval, and management.

OAD 200 Administrative Office Management (3)
Basic concepts of office management, organization structure, and design; systems analysis; motivating, supervising, and communicating with office employees.

OAD 220 Business Report Writing (4)
Business report writing including periodic, situational, informational, and feasibility reports incorporating desktop publishing techniques.
Prerequisite(s): ENG 221, OAD 103, OAD 130, or instructor permission
Corequisite(s): ITS 12P

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 103, OAD 130 or instructor permission

OAD 248 Basic Medical Machine Transcription (4)
Introduction to machine transcription and production of medical documents.
Prerequisite(s): OAD 103, 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, BIO 102
Corequisite(s): OAD 285
Lab fee: $10

OAD 260 Office Simulation (5)
A comprehensive course making use of all knowledge and skills necessary to perform the duties in a modern office. A project-centered approach exposing the student to a wide variety of situations demanding judgment, initiative, decision-making, organizing and planning work, meeting deadlines, and other related administrative abilities.
Prerequisite(s): ENG 221, ITS 12D, ITS 12S, ITS 101, OAD 103, OAD 135, OAD 140, OAD 248 (MOA majors)
Corequisite(s): ITS 12P

OAD 270 CPT-Coding (5)
Introduction to ambulatory coding and payment systems emphasizing CPT-4 coding. Laboratory experience with empahsis on application of related skills with accuracy and completeness.
Prerequisite(s): BIO 102, BIO 105
Lab fee: $35

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
Lab fee: $35

OAD 285 Co-op Education I (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 242, OAD 249, OAD 260, approved co-op placement

(PED) Physical Education

PED 101 Step Aerobics (1)
Warm-up exercises, strengths and flexibility exercises, and cool down exercises. Knowledge of safe fitness techniques and benefits.

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.

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.

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.

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.

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.

PED 154 Yoga II (1)
Using Yoga and meditation techniques to reduce stress. Graded S/U.
Prerequisite(s): PED 153

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.
Lab fee: $12

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.
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.

PGR 151 Thinking Skills (3)
A practical approach to the development of critical thinking skills. Problem-solving, decision-making, inductive reasoning, deductive reasoning, propaganda, analysis of arguments.
Lab fee: $5

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.
Lab fee: $7

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.

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 cerain personal skills required for success in college, a determination of need for change, and the development of a goal to facilitate a successful outcome.
Lab fee: $7

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.
Lab fee: $9

PGR 194 Stress Management (1)
Identify stressors and manage stress in daily life. Individual stress assessment, cognitive-affective-physical techniques for stress management, stress in society, stress in the workplace, health and stress,and personal and community resources. Graded S/U.

PGR 195 Campus Leadership (1)
Practical approach to student leadership situations to increase technical skills involved in campus organizations. Graded S/U.

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.

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.

(PHL) Philosophy

PHL 110 Problems in Philosophy (3)
Introduction to the philosophical method. A survey of problems from both Western and Asian perspectives concerning the nature of reality, God, human nature, sources of knowledge, and the nature of moral value.

PHL 200 Practical Logic (3)
Methods for determining good reasoning from bad. Topics may include: critical thinking; knowledge, belief, and truth; science and pseudoscience; informal fallacies; and Venn diagrams. The student learns to identify, analyze, and evaluate basic inductive and deductive arguments.

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, sexism, and economic exploitation in order to develop a method for approaching moral concerns.

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.

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.

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.

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.

(PHO) Photography

PHO 111 Photography I (3)
An introductory course in the fundamentals of 35mm photography and the black and white darkroom.
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
Lab fee: $25

PHO 121 Color Photography I (3)
An introductory course using 35mm cameras, color negative/positive films, and the fundamentals of color developing and printing.
Lab fee: $25

PHO 122 Color Photography II (4)
A continuation of Color Photography I. Emphasis placed upon medium format photography and color positive materials.
Prerequisite(s): PHO 121
Lab fee: $25

PHO 124 Photography Portfolio (4)
Analysis of market trends, business practices, and client relations. Processing, shooting and printing for the portfolio which must be reviewed by a panel of editors, photographers or faculty.
Corequisite(s): PHO 112

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): DEV 101
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
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): PHY 110, ENT 101, MTH 120 or MTH 121
Corequisite(s): MTH 140
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): PHY 111, MTH 140
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): PHY 112, MTH 140
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): Satisfactory score on math placement test
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): PHY 110 or PHY 111
Corequisite(s): 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): PHY 250
Corequisite(s): MTH 222
Lab fee: $15

PHY 252 General Physics III (5)
Continuation of General Physics II covering wave motion, heat, laws of thermodynamics, kinetic theory, electromagnetic waves, geometrical optics, interference, and diffraction. Use of calculus in interpreting physical phenomena.
Prerequisite(s): PHY 251
Corequisite(s): MTH 223
Lab fee: $15

(PLS) Political Science

PLS 110 American National Government (3)
Basic concepts and structure of national government, focusing on checks and balances, federalism, civil rights and liberties, political parties, elections, interest groups, media, political institutions, and public policy.

PLS 120 American Issues (3)
Exploration of political and social issues in Government. Historical documents reveal the dynamics of living in America.

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.

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.

PLS 230 International Politics (3)
Introduction to the international political system including state and non state actors, conflict roots, approaches to peace-keeping and current issues.

(PSY) Psychology

PSY 111 Psychology I (3)
Fundamental principles and practices of psychology. Includes theories and methods, biological bases, learning and memory, thought and intelligence, language, human development, personality, and measurement.

PSY 112 Psychology II (3)
Fundamental principles and practices of psychology continued. Includes sensation and perception, states of consciousness, motivation and emotion, stress, human sexuality, social behavior, abnormal behavior. This is not a general education elective for students seeking technical degrees.
Prerequisite(s): PSY 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

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)
Classification, etiology, diagnosis, and treatment of abnormal behavior. Stress, anxiety, depression, schizophrenia, mental retardation, sexual deviation, problems of childhood and old age.
Prerequisite(s): PSY 111

(PTA) Physical Therapist Assistant

PTA 144 Introduction to PTA (5)
Introduction to role and scope of physical therapist assistant practice. Legal and ethical accountability; history of PTA and professional organizations; health delivery systems; teaching-learning principles, introduction to interpersonal communication skills, cultural diversity and disability awareness. Introduction and practice of basic therapeutic procedures: body mechanics, vital signs, infection control, goniometry and manual muscle testing.
Prerequisite(s): Instructor permission
Corequisite(s): BIO 118
Lab fee: $10

PTA 145 PTA Procedures I (4)
Continuation of goniometry and manual muscle testing for all joints; introduction to therapeutic exercise; documentation.
Prerequisite(s): BIO 102, BIO 118, BIO 121, PTA 144
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
Corequisite(s): PTA 160
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
Corequisite(s): BIO 123, PSY 221, PTA 146
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.
Prerequisite(s): PTA 146, PTA 160
Corequisite(s): PSY 222
Lab fee: $30

PTA 260 PTA Rehabilitation II (6)
Normal motor development; motor control; pediatric pathologies and rehabilitation; Introduction to adult neurological disorders and rehabilitation.
Prerequisite(s): PTA 146, PTA 160, PTA 241, PSY 221, PSY 222
Corequisite(s): PTA 281, PTA 291
Lab fee: $10

PTA 265 PTA Rehabilitation III (6)
Adult orthopedic and neurological pathologies requiring advanced treatment concepts; introduction to manual therapy; advanced neurological rehabilitation; prosthetics, orthotics and adaptive seating.
Prerequisite(s): PTA 260
Corequisite(s): PTA 282, PTA 292
Lab fee: $10

PTA 270 PTA Trends and Issues (2)
This course will cover current trends in practice; health care financing; interpersonal communications; contracts; supervisory/management skills; ethical issues.
Prerequisite(s): PTA 144

PTA 281 Directed Practice I (3)
Application of knowledge and skills for physical therapist assistants at a beginning level; supervised experiences in selected agencies.
Prerequisite(s): PTA 146, PTA 160, PTA 241
Corequisite(s): PTA 260, PTA 291

PTA 282 Directed Practice II (3)
Application of knowledge and skills for the physical therapist assistant at a developing level; supervised experiences in selected agencies.
Prerequisite(s): PTA 260, PTA 281, PTA 291
Corequisite(s): ENG 223, PTA 265, PTA 292

PTA 283 Directed Practice III (0)
Continuation of application of physical therapist assistant knowledge and skills progressing from developing to entry level; supervised experiences in selected agencies.
Prerequisite(s): ENG 223, PTA 282, PTA 292,
Corequisite(s): PTA 293

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): PTA 146, PTA 160, PTA 241
Corequisite(s): PTA 281

PTA 292 Seminar II (2)
Discussion of clinical situtations 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 281, PTA 291
Corequisite(s): PTA 282

PTA 293 Seminar III (2)
Various projects including Capstone project demonstrating entry level physical therapist assistant knowledge, skills, and behaviors.
Prerequisite(s): PTA 282, PTA 292
Corequisite(s): PTA 283

PTA 295 Special Topics (1)
Selected topics related to the practice of physical therapy. Focus of topics will be on current trends, issues and treatment practices.

(QET) Quality Control

QET 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.
Lab fee: $15

QET 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): ENT 210, MTH 140
Lab fee: $10

(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.

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.

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.

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.

(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.

RST 261 Regional Studies of Asia - Japan (3)
An introduction to the land, people, history, politics, social institutions, literature, and the arts of Japan.

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.

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.

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.

(SOC) Sociology

SOC 110 Sociology (3)
Social theory, methodology, and principles to provide a framework to study culture, socialization, stratification, and deviance.

SOC 140 Marriage and the Family (3)
Historical and cross cultural examination of marriage and family practices.

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.

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

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.

(SPN) Spanish

SPN 111 Spanish I (4)
Study of the vocabulary and structure of the Spanish language; practice in conversation, reading, and writing.

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

SPN 213 Spanish VI (4)
Further grammar review, reading, and discussion of selected texts with practice in speaking and writing the language.
Prerequisite(s): SPN 212

(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 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 outgroups. Explore feelings, beliefs, values and readiness to make a committent to social work.

SWK 105 Chemical Dependency I (4)
Physiological, psychological and sociocultural effects of addiction to harmful substances. Codependency. Identification of addictions and referral process.

SWK 120 Social Work Methods and Procedures (4)
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): SWK100

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): SWK 100

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

SWK 205 Chemical Dependency II (4)
Theories of treatment, recovery and prevention of addictions. Treatment skills and modalities.
Prerequisite(s): SWK 105

SWK 210 Social Gerontology (3)
Generalist social services practice serving elderly individually, in groups and in the community. Covers general aspects of the biological and psycho-social issues of aging.
Prerequisite(s): SWK 100

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 105, SWK 205

SWK 220 Social Service to Individuals with MR/DD (3)
Social work practice serving individuals with mental retardation/ developmental disabilities (MR/DD). Etiology, social, ethical and political issues, services in education, training, and life skills.

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 100

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): SWK 100, SWK 231 or for ECE 100 and SWK 136

SWK 234 Case Management I (3)
Overview of case management, case assignment, planning, goal setting, intervention, and evaluation.
Prerequisite(s): SWK 100

SWK 235 Case Management II (4)
Continuation of Case Management I with emphasis on application of generalist skills to perform case management assessment, planning, and intervention and link clients to appropriate resources.
Prerequisite(s): SWK 234, SWK 271, SWK 291

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 100, SWK 120

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

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

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 100, SWK 120

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

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

(THE) Theatre

THE 105 Oral Interpretation of Literature (3)
Introduction to the art of oral interpretation with emphasis on both poetry and prose.

THE 107 Speech & Voice for Actor (4)
Basic training and practice in the actor's use of voice and speech.

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.
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.
Lab fee: $25

THE 130 Introduction to Theatre (3)
The art of the theatre explored through the historical, literary, and production perspectives.

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.

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.

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.

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.

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.

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.

THE 203 Acting II (4)
Continuation of Acting I 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.

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.

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.

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.

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 250 Business Theatre Presentation Techniques (3)
Exposure to and practice with technical equipment used in business/corporate theatre, including (but not limited to) video, slides, and multimedia. Focus on interrelationship of an array of equipment/techniques used in staging live theatrical events.

THE 260 Theatre Equipment Maintenance (4)
Systematic approach to maintenance and trouble-shooting of theatre sound and lighting equipment.
Prerequisite(s): THE 211, THE 221

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.

THE 271 Theatre History II (4)
Survey of the history and development of theatrical production from the seventeenth century through the present. Emphasis on play production rather than literature. Representative plays studied.

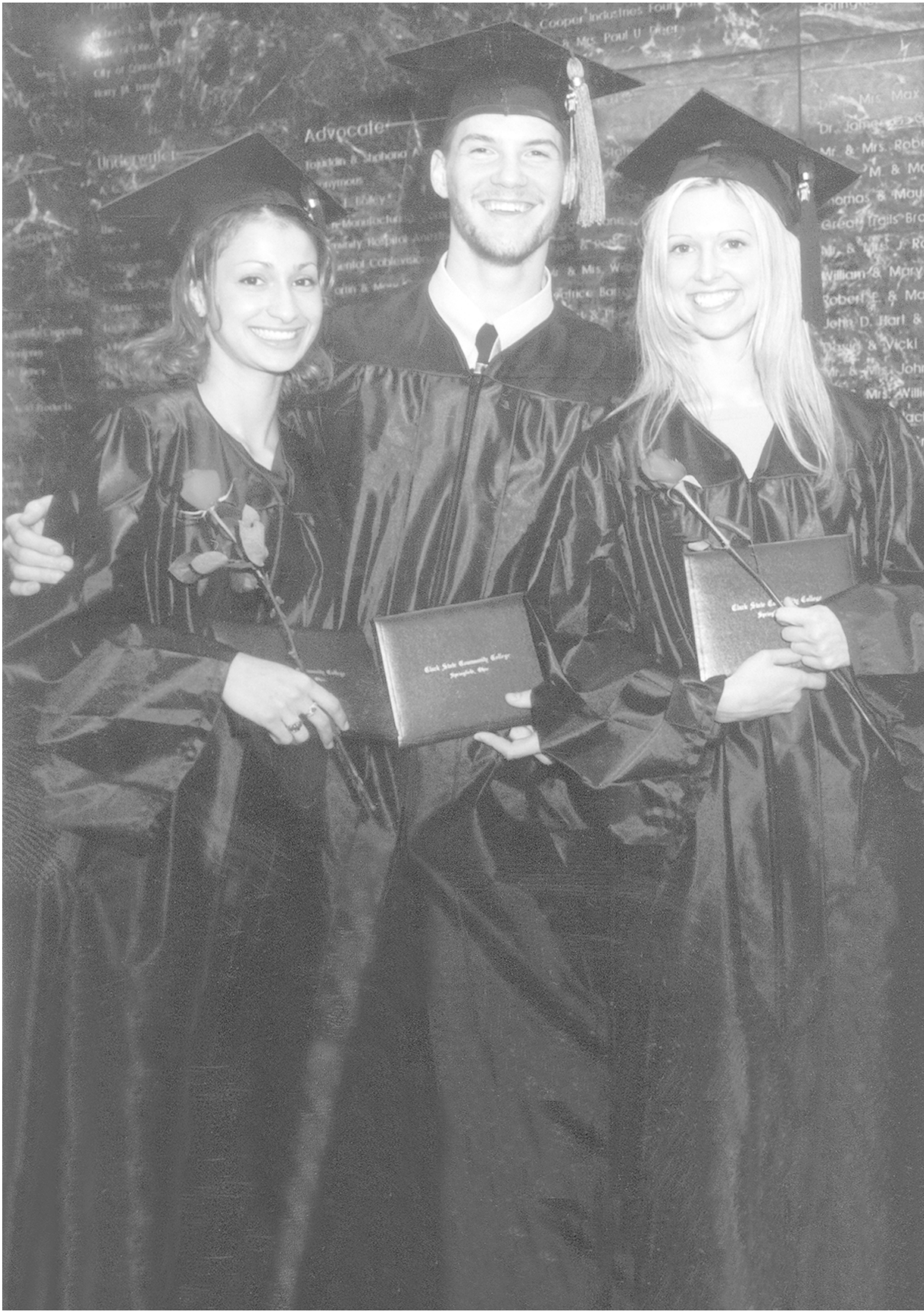
THE 285 Co-op Education I (3)
The opportunity to relate studies to the world of work. Familiarity with a career in technical theater and application of the principles and theories learned in classroom experiences.
Prerequisite(s): EBE 100 and approved co-op placement

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



Student Services

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 G.E.D. 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 developmental courses or if the student is also working.

Enrollment Categories

Post-Secondary Enrollment Options Program

The Post-Secondary Enrollment Options 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 Options 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.

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 Records and Registration Office can provide you with materials concerning international students.

Senior 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 here to help you get started at Clark State. The Admissions Office, located in Rhodes Hall, Room 210, has everything you need. Fill out the Clark State admissions application and submit it to the Admissions Office.

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 106. Students applying to the Court Reporting program must submit a high school diploma or GED certificate.

Fall Quarter applicants are notified of their acceptance to the College beginning in January. Students applying in other quarters are generally notified within one week after receipt of their application to the College.

All admission procedures apply to both full-time and part-time students. New students are strongly advised to attend a new student orientation session which is scheduled through the Counseling Office located in Rhodes Hall.

Entrance Exams

As an open admissions institution, we don't 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, 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 or those enrolling exclusively in continuing education or 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.

In addition, you may be asked to take an algebra test depending on your college plans. If you plan to enroll in Medical Laboratory Technology, Information Technology Systems, the Associate of Arts, the Associate of Science or Engineering Technologies, you will need to take the algebra test (provided you have had high school algebra). You may also be required to enroll in our developmental courses based on your specific program or test scores. The Advising Center staff will let you know if you need to take developmental courses.

Most often, your placement test results will remain valid for three years. Placement tests in reading, writing, mathematics and/or algebra are free of charge. Testing is available Monday through Thursday, 8:30 a.m.-7 p.m. and Friday, 8:30 a.m.-4 p.m. 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 advisor by calling 937/328-6019.

Joint Vocational School Graduates

High school graduates of the following joint vocational schools may apply for advanced standing at Clark State without proficiency testing: Greene County Career Center, Miami Valley Tech Center, Ohio Hi-Point JVS, Springfield-Clark County JVS, Tolles Technical Center and Upper Valley JVS.

Agreements with these joint vocational schools 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 graduates within the last two years must have a minimum grade point average of 3.0 (4.0 scale) in their program and overall. Additional information about this program is available in the Records and Registration 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, provided those courses are required in your current major.

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 Technologies Division for additional reinstatement requirements.

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

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 and 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) for these space-limited programs (except PTA) are considered for admission by the date order in which they file a petition in the Admissions Office to be placed on the waiting list.

While on the waiting list, all applicants must maintain a 2.0 cumulative grade point average in the required courses in the curriculum.

Developmental courses and other courses which are not listed as part of the curriculum are not 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 and Medical Laboratory Technology applicants must achieve a 2.0 cumulative grade point average in order to be eligible for acceptance into the program. Physical Therapist Assistant students must have a 2.5 cumulative average.

Applicants who have not achieved the required 2.0 or 2.5 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. All incoming Paramedic students must also meet the state entrance requirements described on page 28.

Exercise Science

1. Successfully complete the reading, writing and math placement tests or successfully complete developmental courses.

2. Prerequisites are high school chemistry or CHM 012 or CHM 110 with a C or better, high school biology or BIO 105 with a C or better and high school algebra or DEV 101 with a C or better.

3. Health requirements and immunizations must be completed prior to the beginning of the second year. A physical exam, a two-step Mantoux test, professional CPR certification and a health history are required.

Physical Therapist Assistant

1. In addition to the general admission requirements, all students must have a minimum of a 2.5 GPA in the prerequisite and required courses taken at Clark State and/or in transferred courses taken at other schools. (High school transcript or GED required.)

2. Prerequisites include one course of high school biology or BIO 105, one course of high school or college chemistry within the past five years or CHM 110 and one course in high school or college physics or PHY 110; all with a grade of C or better.

3. Students need to complete a petition to enter the PTA program and obtain an application packet from the Admissions Office. This packet contains detailed information about deadlines and any additional requirements needed for admission. All forms must be completed and returned as in structed in the packet.

4. Applicants will be notified of their status by July of each year.

Medical Laboratory Technology

1. One unit of high school algebra and an appropriate score on the algebra placement test. A grade of C or better is required if DEV 101 is taken.

2. One unit of high school chemistry or successful completion of CHM 012 with a grade of C or better.

3. Contact the program advisor in Health Technologies for admission confirmation.

Practical Nursing (Begins in Summer Quarter)

1. Successfully complete the reading, writing and math placement tests or successfully complete developmental courses.

2. After the math prerequisite has been completed, students must petition for the program in the Admissions Office. 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.

Registered Nursing/Evening Registered Nursing

1. Successfully complete the reading, writing and math placement tests or successfully complete developmental courses.

2. One unit of high school algebra is recommended.

3. One unit of high school chemistry or successful completion of CHM 012 or CHM 110 with a grade of C or better is required.

4. After the math and chemistry requirements have been completed, students must petition for the program in the Admissions Office. If all requirements are complete, the student's name will be placed on the waiting list.

5. Successfully complete the MST 181 or equivalent course and furnish verification of nurse aide competency at the time of enrollment in the technical courses.

Reinstatement for Space-Limited 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 Technologies Division for a copy of the Reinstatement Policy.

Students who wish to re-enter a space-limited program are required to have at least a 2.0 cumulative grade point average (2.5 for PTA students) 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.

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 College's Advising Center will assist you in scheduling your first quarter classes after you've taken the placement test.

If you have not declared a major, you should contact the Counseling 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. You should contact the appropriate division office for the name of your advisor.

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 Advising Center at 937/328-3855 to make an appointment for registration. New students 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. This is also when new student orientations are held.

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 and other campus locations before a new quarter begins.

There are four ways to register: fax your schedule request to 937/328-6097, mail your schedule request to the Records and Registration Office, telephone registration by calling 937/328-8060 (only current and returning students) and in person at the Records and Registration Office, Rhodes Hall, Room 213 or the Business 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 academic advisor and the 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, 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 Veterans Office, Rhodes Hall, Room 213, 937/328-6014. 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. Infor-

mation 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 is 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.

Tuition

	Ohio resident	Out-of-state resident
Instructional fee (up to 16 credit hours)	$48.00	$100.00
General fee (up to 14 credit hours)	$ 6.00	$ 6.00
Technology fee (up to 16 credit hours)	$ 4.00	$ 4.00
	$58.00	$110.00

Other Fees and Expenses

Application fee (one time only)	$15
Late payment fee (per quarter)	$15
Late registration fee (per quarter)	$25
Transcript fee	$ 2
Auxiliary services fee (per quarter)	$ 5
Delayed Payment Plan (DPP) service charge	$15
DPP late payment fee (per installment)	$15
Proficiency fee per credit hour	$ 5
Prior Learning Portfolio Assessment (per course)	$40
Lab fee (for certain courses only)	Varies

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 $2 per credit hour technology fee, up to a maximum of 16 credit hours. Revenue generated by this fee is used to directly benefit students. The dean of Information Technology has the detailed information on the expenditure of these funds.

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

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 first day of class	100%
By the fourth calendar day after the first day of class	75%
By the ninth calendar day after the first day of class	50%
After the ninth 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	$50
Parked in fire lane	$50
Moving violations	$25
Parking on grass, sidewalk, loading zone or other restricted area	$25
Student in faculty/staff lot	$20
Improper parking	$20
No valid permit	$10
Parking in visitor lot	$10

The Clark State Parking Guide is available for viewing on the College web page. Access the Campus 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 classifed 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, self-sustaining 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 or 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 and works with veterans and international student admissions. 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 request form in the Records and Registration Office or by mailing or faxing a request in writing to the Records and Registration Office. When requesting a transcript, include your name, Social Security number, birthdate, 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

In compliance with the Family Educational Rights and Privacy Act of 1974 (as amended), you have the right to inspect and review your official records, files and data directly, including material incorporated into your cumulative record folders.

Your request to inspect and review records needs to be made in writing to the Records and Registration Office. Your request should specify the records to be inspected and reviewed.

Information on special conditions and exceptions is available in the Records and Registration Office.

Right to Hearing

You have the right to challenge the contents of your educational records, to request corrections of any inaccurate, misleading or inappropriate data and to insert into the records an explanation regarding the contested item.

If you have an objection to information in your educational record, you should address your complaint to the registrar, who will schedule a meeting. 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 the student) to a formal hearing in accordance with the College's established grievance procedures.

Release of Information

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

You may request that your "Directory Information" not be released by signing a request to withold 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

Official grade reports are mailed at the end of each quarter to the address we have on file for you in the Records and Registration Office. 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 developmental 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.

Computer Literacy

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

Definition of Credit Hour

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

Grading System

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

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

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	B	9
Course 2	3	C	6
Course 3	4	B	12
Course 4	3	C	6
Total hours: 13		Total points:	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 developmental 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 which emphasize global awareness. The number of classes vary 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, Exercise Science, Medical Laboratory, Practical Nursing, Registered Nursing, Physical Therapist Assistant and Social Services. In addition, students in the Physical Therapist Assistant program must maintain a 2.5 GPA in required major courses.

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.

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 & Articulation. If you disagree with a decision, you may follow the appeals process.

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 which 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). 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

Legal residents of Ohio should apply for the Ohio Instructional Grant (OIG) or the Ohio Part-time Student Instructional Grant (OIP) via the FAFSA.

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 are enrolled at least halftime with the exception of the part-time Pell and OIP program.
5. You need to be a U.S. citizen or eligible non-citizen.
6. 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 which 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 drop below six credit hours for certain aid programs or 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 2000-01 the annual value of Pell Grants at Clark State ranged from $400-$3,300 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 halftime student (enrolled in six credit hours). This program is open to all dependent and independent undergraduate students based on financial need.

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

Federal Unsubsidized Stafford Loan Program

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

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

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. 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.

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.

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. Interest is 2.2 percent annually or $2, whichever

amount is greater. The borrower must demonstrate the ability to repay the loan. Receipt of this loan is contingent upon availability of funds.

Academic Progress

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, Federal Stafford Loans and Federal PLUS Loans. This policy is applied to all financial aid applicants who are working toward a degree, certificate or transfer credits regardless if they received financial aid previously.

Credit Hour Requirements

Students must successfully complete 67 percent of all hours attempted with an A, B, C, D, S or IP. Students must 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	Below 1.50
16-30	Below 1.60
31-45	Below 1.70
46-60	Below 1.80
over 60	Below 2.0

Students must complete their program of study within 160 credit hours if pursuing a degree, or 93 credit hours if pursuing a certificate. All hours attempted at Clark State and any transfer credits accepted by Clark State are included in the 160 and 93 credit hour maximums. Students who fail to meet the minimum credit hour or grade point will be placed on Financial Aid probation.

Credit Hour Probation

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

Grade Point Probation

Students must maintain the minimum quarterly grade point until cumulative grade point reaches the minimum. Students will be awarded federal financial aid on a quarterly basis only, maintaining probation status. All students must have attained a cumulative grade point average of 2.0 by the end of the 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 federal financial aid eligibility.

Financial Aid Suspension

Once federal financial aid is suspended for GPA or completion percent, students have the right to appeal. The decision of the Financial Aid Appeals Committee is final.

Financial Aid Appeals Process

A student losing eligibility for federal financial aid and who feels that mitigating circumstances exist, may appeal in writing to the Financial Aid Appeals Committee. If an appeal is denied, the student must successfully complete 24 credit hours without federal aid and will then be reviewed by the committee. Maximum credit hours is not included in the appeals process. If financial aid is suspended a second time, there is no appeal.

New Programs of Study

A student who changes his/her major or is seeking a second degree before reaching the credit hour maximum 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, hours worked and enrollment requirements are the same as for the federal program.

The Financial Aid Office assists students with locating part-time employment on campus.

Withdrawals

A student's financial aid is based on the number of credit hours carried at the end of the first week of the first quarter. Therefore, if you withdraw from any or

all classes during the second week, you may have your financial aid reduced, eliminated or be required to repay funds for the quarter. You must notify the Financial Aid Office at the time of your withdrawal. If you withdraw during Clark State's refund period, you may repay the funds to the Pell Grant program to re-establish that quarter of eligibility.

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

Your financial aid may be adjusted whenever you add or drop classes or completely withdraw. Effective Fall Quarter 2000, federal regulations regarding repayment of Federal Financial Aid have changed the formula for calculating the amount of aid a student and school may retain. Refer to page 109 for further details concerning the cash refund policy.

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. 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. 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.

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.

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.

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 March 29, 2002.

Clark State Foundation

The Clark State Community College Foundation is a non-profit organization whose purpose is to provide 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 and return it by March 29 for Fall Quarter. Your application will then be reviewed by the Scholarship Review Committee. For a list of Foundation scholarships, please see the next page.

Other Scholarships Available at Clark State

You may also want to apply for these scholarships which are not funded through the Foundation.

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 60 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.

Scholarships for Clark State Students

Scholarship	Major	Year 1 or 2	Minimum GPA	Other criteria
Institutional Scholarships				
Trustees	Any	1, renewable	3.5 or top 15%	High school seniors
Tech Prep	Tech Prep path	1, renewable	2.5	High school seniors
Foundation Scholarships				
Aetna	Business	2	2.5	
AFCEA	IT	2	2.5	
Gary and Kathy Buroker	Any	1		GRADS students
B.R. and R.R. Chadha	Psych/Health	either	3.0	
Childcare	Any	either	2.0	Childcare at ECEC
Clark Co. Building Ind.	Related	either	2.5	
Barbara A. Davis	Health	1	2.5	Shawnee H.S. preferred
Newell Elder	Ag/Hort	either	2.5	Clark County
Dr. Warren G. Elliott	Any	either	2.5	Clark County
Faculty	Any	2	3.0	
Ann Field	Nursing	1		
Foundation Commitment	Any	either	2.5	Financial need
Kay Frazier	Court reporting	1	3.0	
Frontiers	Any	either	2.5	Minority, Clark County
Gerald Furay	Any	either	2.5	
Kathryn Hickes	Childcare	1	2.5	Clark County graduate
Florence E. Hilbert	Nursing	2		Must be a parent
Lion's Club	Any	either		Visually impaired
Alice E. McKinley	Any	2	3.0	
Mildred Miller	Any	2	3.0	
Ilean Moore	Nursing	either	2.5	
Marguerite Morris	Accounting	either	3.0	
Connie Murphy	LPN/RN Transition	either	2.5	
National City	Accounting	2	3.0	
Mildred Penwell	Any	either	2.5	
Performing Arts Program	Perf. Arts/Tech. Theatre	1	2.5	Audition required
Dan Pond	Ag/Hort	either	2.5	
President's	Any	1	Score 56+	Must be G.E.D. graduate
Mary Ann Remerowski	Nursing	either	2.5	Graham High School
Robbins & Myers	Related	either	3.0	Preference to employees
Rotary Club	Any	either	2.0	Physical disability
Hilda Seaman	Any	either		Visually impaired
Society of Manufacturing Engineers	Engineering Technology			
Jennifer Spencer	Transfer	graduate	3.0	For transfer to 4-year
Springfield News-Sun	Any	either	2.0	Need
Union Club	Nursing	either	2.5	Clark County
Vernay Foundation	Any	1, renewable	2.5	Yellow Springs High School
Arthur B. Wall	Law enforcement	either	2.0	
Peggy Wenrick	Any	1	2.5	Clark County high school
Monte Zinn	Business related	either	3.0	
Zonta	Any	either	2.5	Displaced homemaker

Note: Other criteria may apply for some scholarships; financial need is considered for many scholarships. Awarding of scholarships is contingent upon available funding and qualified recipients.

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 33,000 books, 300 periodicals with electronic access to hundreds more and 2,000 pieces of audiovisual material. The media center houses computers, typewriters, word processors and an array of audiovisual equipment. Students have access to the Internet from the Library.

Handouts, bibliographies and pathfinders for various topics are available at the circulation desk or from the librarians. You can connect to the Library's home page at http://lib2.clark.cc.oh.us/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 other college libraries, catalogs and electronic data bases.

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.

Because Clark State belongs to SOCHE (Southwestern Ohio Council for Higher Education), you may borrow books at other SOCHE as well as OhioLink institutions with a validated Clark State ID.

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. Counseling services are confidential. For more information, please stop by the Counseling Office, Rhodes Hall, Room 127, or call 937/328-6024.

Academic Support Services

The Academic Support Services Office coordinates disabilities services, tutoring, supplemental learning programs, articulation and transfer to four-year schools and the academic advising for students who are entering Clark State for the first time. For more information, please call 937/328-3855 or visit us in Rhodes Hall, Room 224.

Tutoring

You are entitled to free tutoring as a Clark State student. If you are interested in getting a tutor or becoming one, please contact the tutor coordinator in Rhodes Hall, Room 220 or in the Brinkman Educational Center, Room 106. The coordinator assigns tutors and assists in arranging contact hours - usually two hours per week per subject.

Disabilities Services

It is Clark State's policy to provide reasonable accommodation to students with disabilities. Students with physical, mental or learning disabilities that may require reasonable accommodation should contact the coordinator of Disability Services in Rhodes Hall, Room 224. To best provide accommodations, students are strongly encouraged to request services several weeks prior to the start of the quarter in which said services will be needed by calling 937/328-6019.

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, 10 a.m.-7 p.m. and Friday, 10 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. clark.cc.oh.us

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.

Developmental Courses

Developmental 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 developmental courses.

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

Developmental courses don't 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 developmental 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.

If you are enrolled in the Associate of Arts or the Associate of Science degrees, you must take at least one personal growth course at some time during your studies.

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 & 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 visist us at www.clark.cc.oh.us/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 3.7 or above and 24 credit hours toward an associate degree.