



CHEF



FLIGHT NURSE



VETERINARIAN



DENTAL HYGIENIST



DOCTOR



FIRE FIGHTER



TEACHER

HOW DO YOU PICTURE YOUR FUTURE?

**MCC** Mohave Community College

**2011-12 Catalog Addendum**

## Board of Governors



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the Arizona Department of Health Services Bureau of Emergency Medical Services, 150 North 18th Ave., Suite 540, Phoenix, AZ 85007. 602.364.3150.

The Mohave Community College Dental Hygiene Program is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312.440.4653, or at the American Dental Association, 211 East Chicago Ave., Chicago, IL 60611.

The Mohave Community College Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs [CAAHEP] in cooperation with the Accreditation Review Committee on Education in Surgical Technology.

The Mohave Community College Physical Therapist Assistant Program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax St., Alexandria, VA, 22314; 703.706.3245; accreditation@apta.org; www.capteonline.org.

### Equal Opportunity Policy Statement

Mohave Community College does not discriminate on the basis of sex, color, race, religious preference, age, disability, national origin, veteran status or any other legally protected class in any of its policies, practices, and procedures, and it is an affirmative action and equal opportunity employer. For more information, call the Human Resources Office at 928.757.0835, 1971 Jagerson Ave., Kingman, AZ 86409. Grievance procedures are available at the Mohave Community College libraries in Bullhead City, Colorado City, Kingman and Lake Havasu City and at [www.mohave.edu/pages/287.asp](http://www.mohave.edu/pages/287.asp).

### Americans with Disabilities Act (ADA) Policy Statement

Mohave Community College strives to facilitate, within reason, appropriate resources, services, and auxiliary aids to allow each qualified person with a documented disability equitable access to educational programs, social experiences and career opportunities. The vice president of administration, dean of student services and director of human resources act as ADA coordinators for the college to oversee compliance in the areas of facilities, student accommodations and employment practices. You can also find it at [www.mohave.edu/pages/253.asp](http://www.mohave.edu/pages/253.asp).

### Diversity Statement

Mohave Community College is committed to providing equal employment opportunity, educational opportunity, and advancement to individuals without regard to race, color, religion, sex, national origin, age, mental or physical disability, sexual orientation, or veteran status or any other legally protected class in any of its policies, practices, or procedures. The equality of employment opportunity for all persons must be consonant with all applicable provisions of state and federal laws. The college shall promote equal opportunity and treatment on a continuing basis through a positive and ongoing affirmative action program.

### Safety on Campus

Mohave Community College is proud of its reputation as a "safe place to be." Safety requires constant vigilance by the college, students, staff and all those using college facilities or resources. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires MCC to disclose statistics on crimes committed on and near its campuses for the previous three years. A copy of this report is available at: [www.mohave.edu/safety](http://www.mohave.edu/safety).

## MCC Values Statements

### 1. Building a Better Tomorrow through Learning

Learning is the core of the Mohave Community College mission. We acknowledge the importance of continuous learning to ensure the best possible future for everyone.

### 2. Accountability for the Future

The decisions made today affect individuals in the future. At Mohave Community College, we accept responsibility for our actions and decisions. We hold ourselves accountable to our students, our communities, and to the generations who come after us. MCC decisions will be designed to fulfill our vision for the future, aiming to achieve reliable, long-term improvements over short-term expediency.

### 3. Integrity

We remain committed to our values. Our decisions are consistently and courageously made in alignment with our convictions. We consciously foster an atmosphere of openness

## Attending MCC



An example follows:

Quarter Credit	=	Semester Credit
1	=	0
2	=	1
3	=	2
4	=	2
5	=	3
6	=	4

If a student at a regionally accredited quarter-unit school completed an introductory psychology course at 3 or 4 quarter units, the most s/he might be awarded in transfer would be PSY1TR. The 1TR designation shows credit awarded, but not toward any particular course in that discipline as the student has not met the 3 semester units needed at MCC. A student completing 5 quarter units of introductory psychology at a regionally accredited school may, after review of the course description, be eligible for PSY 101 since the 3 semester unit requirement is met.

Science, allied health, computer and other technical courses taken 10 or more years ago do not transfer and must be retaken. Fire Science, Emergency Medical Services, Administration of Justice Studies.

If a student's cumulative GPA was below 2.0 at a previous college/university, the student will be admitted to MCC on academic probation. (See the Academic Probation section for details.)

In order to have official transcripts evaluated by the Office of the Registrar, the student must:

1. Complete an MCC admission packet
2. Receive an official MCC ID number
3. Request that the transcripts be evaluated. This request is done through the following Student Services personnel: director, academic and career advisor, academic advisor, or admissions counselor

### Western Undergraduate Exchange (WUE) Residency Status

Mohave Community College participates in the Western Interstate Commission for Higher Education (WICHE) tuition program: WUE. Students who may request this tuition rate must be: 1) residents of eligible states, or 2) students who have not met Arizona residency requirements and have most recently lived in an eligible state. Eligible states are: Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.

- Some MCC programs are not eligible for the WUE tuition rates. See WUE Tuition rates in the tuition section for details.
- Full-time enrollment under WUE status does not count toward establishing Arizona residency for tuition purposes.

### Transferring Credits from Other Institutions

Students who have attended other colleges/universities must provide MCC with an of-

ficial transcript of all work completed at those institutions.

The Office of the Registrar will evaluate these transcripts to determine what credit will be granted for transfer courses that satisfy MCC degree and certificate requirements. The registrar has final authority in the decision of course transferability.

Credits must have been acquired through a regionally accredited college/university to be eligible for transfer.

Only courses with a grade of "C" or higher will be considered for transfer credit. A "Pass" grade may be accepted, if it is noted on the transcript that "Pass" is equal to a "C" grade.

Courses that fall short of MCC's semester hour equivalents may not be eligible for transfer. The most common reason a course would fall short of MCC's semester hour equivalent would be the case of a course completed on the quarter system. Quarter units are approximately valued at 2/3 the value of semester credits. MCC divides the quarter credits by the standard 2/3 and rounds down to the nearest whole number.

## TRANSFER CORES

Arizona General Education Curriculum (AGEC)  
 AGECE-A - Arts  
 AGECE-B - Business  
 AGECE-S - Science

## DEGREES

Associate of Arts (AA)  
 Associate of Business (ABus)  
 Associate of Science (AS)  
 Associate of Applied Science (AAS)  
 Associate of General Studies (AGS)

### Associate of Arts (AA)

Administration of Justice  
 Art  
 Elementary Education Emphases
 

- Early Childhood Education
- Language Arts
- Mathematics
- Science
- Social Studies

English  
 History  
 Liberal Arts  
 Mathematics  
 Science  
 Social Studies  
 Social and Behavioral Science

### Associate of Business (ABus)

Computer Information Systems  
 Business Administration

### Associate of Science (AS)

Chemistry  
 Geology  
 Life Science

### Associate of General Studies (AGS)

Automotive Service Technology

## CERTIFICATES

Certificate of Completion (AGEC only)  
 Certificate of Proficiency  
 Credential Preparation

## PROGRAMS OF STUDY Degrees and Certificates

### Administration of Justice

AA Degree - Administration of Justice  
 Certificate - Corrections Officer

### Automotive Technology

AAS Degree - Automotive Collision Repair Technology  
 AGS Degree - Automotive Service Technology

### Business

ABus Degree - Business Administration  
 AAS Degree - Accounting  
 AAS Degree - Business and Entrepreneurship  
 Certificate - Bookkeeping  
 Certificate - Business and Entrepreneurship  
 Certificate - Supervisor

### Child Development

Associate Pathway  
 Credential Preparation - Child Development Associate (CDA)

### Chemical Dependency Studies

AAS Degree - Chemical Dependency Studies

### Computer Information Systems

ABus Degree - Computer Information Systems  
 AAS Degree - Systems Administration  
 AAS Degree - Computer Graphics & Web Design  
 AAS Degree - Network Support and Information Security  
 Certificate - Computer Graphics & Web Design  
 Certificate - Systems Support & Security  
 Certificate - Professional Applications  
 Certificate - Programming & Game Development

### Culinary Arts

AAS Degree - Culinary Arts & Hospitality  
 Certificate - Baking and Pastry  
 Certificate - Culinary Arts & Hospitality

### Dental

AAS Degree - Dental Hygiene  
 Certificate - Dental Assisting

### Education

AA Degree - Elementary Education with content emphasis in:
 

- Early Childhood Education
- Language Arts
- Mathematics
- Science
- Social Studies

### Electrical Technology

AAS Degree - Electrical Technology  
 Certificate - Electrician  
 Certificate - Electrical - Industrial Maintenance  
 Certificate - Electrical - Residential Wiring

### Fire Science

AAS Degree - Fire Science  
 Certificate - Fire Fighter  
 Certificate - Driver / Operator  
 Certificate - Fire Officer

### General Studies

AAS Degree - General Studies

### Heating, Ventilation, & Air Conditioning (HVAC)

AAS Degree - Refrigeration Technology  
 Certificate - Commercial Refrigeration  
 Certificate - Residential HVAC

### Liberal Arts & Sciences

AA Degree - Art  
 AS Degree - Chemistry  
 AA Degree - English  
 AS Degree - Geology  
 AA Degree - History  
 AA Degree - Liberal Arts  
 AS Degree - Life Science  
 AA Degree - Mathematics  
 AS Degree - Science  
 AA Degree - Social and Behavioral Science  
 AA Degree - Social Studies

### Medical Assisting

AAS Degree - Medical Assisting  
 Certificate - General  
 Certificate - Insurance Coding  
 Certificate - Phlebotomy

### Nursing

AAS Degree - Nursing (RN)  
 AAS Degree - Accelerated Nursing for Paramedics  
 Credential Preparation  
 - Nursing Assistant (CNA)

## Programs of Study

Step-Out Certificate - Practical Nursing  
Certificate - Practical Nursing  
Refresher - Nurse Refresher Programs  
(LPN and RN)

### Paralegal

AAS Degree - Paralegal  
Certificate - Paralegal  
Certificate - Post-Degree Paralegal

### Paramedic

AAS Degree - Paramedic Emphasis  
Certificate - Paramedic

### Pharmacy Technology

AAS Degree - Pharmacy Technology  
Certificate - Pharmacy Technology

### Physical Therapist Assistant

AAS Degree - Physical Therapist Assistant

### Radiologic Technology

Partnership with Arizona Western College

### Surgical Technology

AAS Degree – Surgical Technology

### Truck Driver Training

Certificate – Truck Driver Training

### Welding Technology

AAS Degree – Welding Technology  
Certificate –

- Wire Feed & Shielded Metal Arc Welding (SMAW)
- Gas Tungsten Arc Welding (GTAW)
- Gas Metal Arc Welding (GMAW)
- Entry-Level I Welder
- Entry-Level II Welder

*NOTE : Certain degree and certificate programs are offered only at specific campuses. For information on availability of programs on your particular campus, contact Student Services.*

## Degree Information

Mohave Community College offers the Associate of Arts (AA), Associate of Business (ABus), Associate of Science (AS), Associate of General Studies (AGS) and the Associate of Applied Science (AAS) degrees. A student may earn only one AA, ABus or AS degree. A student may earn

multiple AAS degrees, depending on the discipline.

Once a student has earned one of these degrees, any of the other degrees can be earned by completing the additional degree requirements with a minimum of fifteen (15) additional MCC credits beyond the previous degree. Degrees may be earned concurrently.

**Example:** A student has earned an AA degree with 64 credits and wishes to earn an AAS degree. The student must complete a minimum of an additional fifteen (15) MCC credit hours and meet all of the requirements of the AAS degree. The student, therefore, would have a minimum total of 79 credit hours.

A student who completes a degree program and elects to pursue another degree is subject to the degree requirements of the catalog in effect at the time the student declares the new degree. A new Degree Declaration Form must be filled out at the time.

### Associate of Arts (AA), Associate of Business (ABus), and Associate of Science (AS)

The Associate of Arts, Business, and Science degrees are designed to enable students to transfer course credits to a college or university granting the baccalaureate degree. Students following these programs will have taken the university parallel requirements in general education.

Students must complete the courses in these programs of study with a “C” or better and have an overall cumulative grade point average of 2.0 or better in order to graduate.

### Associate of Applied Science (AAS)

The Associate of Applied Science degree is intended to prepare the student for entry into a vocational area or to upgrade skills of persons already employed. The 15 hours of general education courses introduce skills needed and desired by employers and employees. The remaining hours include course work to develop skills in the vocational and related areas. Students must complete the courses in the program

of study with a “C” or better and have a cumulative grade point average of 2.0 or better in order to graduate. (See AAS Gen. Ed. checklist.)

Since AAS programs are designed to prepare students for employment in the respective occupational areas, it is necessary that the student follow the program content and sequence as outlined. Any departure from the outlined program must be approved by the appropriate faculty and administration. The specific occupational content is set forth in the program outlined within the respective areas of study.

### Associate of General Studies (AGS)

The Associate of General Studies degree is intended to prepare the student for entry into an occupational area. All course work is related to the student’s occupational goal with general education requirements embedded within the courses. Students must complete the courses in the program of study with a “C” or better and have a cumulative grade point average of 2.0 or better in order to graduate.

**Advising note:** The AAS and AGS are not transfer degree programs; however, some courses may transfer. In pursuing a baccalaureate degree after completing the AAS or AGS, some general education and program area courses may be acceptable for transfer credit. However, some courses in technical programs are so specialized that many colleges and universities do not offer equivalent training and they may not grant transfer credit. Students in this degree program will most likely be required to take additional freshman and sophomore general studies courses. Students must have earned a “C” or better in transferable course work in order to transfer credit.

The Course Equivalency Guide and the transfer guides are designed to help students, with consultation with an advisor, to understand the transfer process. (See: [www.AZTransfer.com](http://www.AZTransfer.com))

### Beyond MCC

#### - Understanding Transfer

MCC has partnerships with many universities. Understanding the ideas and vocabulary for transfer to a university or

## Associate of Applied Science (AAS)

### General Education Core Requirements

A minimum block of 15 credits hours

of lower-division general education coursework must be completed. The block of courses represents only the general education portion of an AAS degree. See your specific program of study for total credit hour requirements. The AAS is not

a transfer degree program; however, many of the individual courses listed in the core may transfer to any state of Arizona community college or state of Arizona university.



## AAS General Education Checklist

### Communications . . . . . 6

Choose **two** courses from the following list:

- ENG 101 English Composition I
- ENG 136 Report Writing
- COM 121 Interpersonal Communication
- BUS 204 Business Communications
- ENG 102 English Composition II
- BUE 105 Business English
- COM 151 Public Speaking

### Critical Thinking and Reasoning . . . . . 3-4

Choose **one** course from the following list:

- Any 100-level or above math, technical math, integrated or vocational math
- Any 100-level or above laboratory science course
- PHI 101 Introduction to Philosophy
- PHI 151 Ethics
- Any vocational ethics course*
- AJS 245 Ethics in Criminal Justice
- BUE 175 Business Ethics
- MEA 100 Medical Law and Ethics
- CHD 120 Professional Ethics in Counseling the Chemically Dependent
- WLD 114 Math for Welders

### Global Awareness . . . . . 3-4

Choose **one** course from the following list:

- ANT 102 Cultural Anthropology
- ART 130 Survey of World Art I
- ART 230 Survey of World Art II
- ASL 101 American Sign Language I
- BUS 206 Micro Economics
- BUS 207 Macro Economics
- ENG 137 Intro. to Literature
- ENG 233 English Literature I
- ENG 234 English Literature II
- ENG 235 American Literature I
- ENG 236 American Literature. II
- FRE 101 Elementary French I
- GHY 240 World Regional Geography
- HIS 131 History of the United States I
- HIS 132 History of the United States II
- HIS 135 Western Civilization I
- HIS 136 Western Civilization II
- HIS 137 20th Century World History
- HUM 150 Introduction to Humanities I
- HUM 151 Introduction to Humanities II
- HUM 250 Intro. to Cinema
- MUS 101 App. & Lit. of Music
- PHI 205 Comparative World Rel.
- POS 120 American National Gov.
- PSY101 Introductory Psychology
- SOC 131 Intro. to Sociology
- SOC 136 Marriage and Family
- SOC 140 Racial, Ethnic & Gender
- SPA 101 Elementary Spanish I

### Technology . . . . . 3

Choose **one** course from the following list:

- CIS 110 or higher
- an integrated academic or vocational course

## TOTAL AAS GENERAL EDUCATION CREDIT HOURS . . . . . 15-17

## Programs of Study

- Transportation related to internship placement is the responsibility of the student.
- Students are required to follow the placement agencies policies during their field experience
- Students are required to absorb any costs involved in obtaining placement (I.E.: fingerprint clearance card, criminal background check, urine analysis, etc.)

### Fall - Year 1 Prerequisites

CHD 100	Foundations of Chemical Dependency . . . . .	.3
ENG 101	English Composition I . . . . .	.3
CIS 110	Introduction to Computer Information Systems . . . . .	.3

**OR**

CIS 131	Microsoft Office Suite . . . . .	.3
PSY 101	Introductory Psychology . . . . .	.3
SOC 131	Introduction to Sociology . . . . .	.3

**Prerequisite Total Credits . . . . . 15**

### Spring - Year One

CHD 102	Communication Skills in Chemical Dependency . . . . .	.3
CHD 110	Biological Systems Pharmacology of the Chemical Dependent . . . . .	.3
CHD 120	Professional Ethics in Counseling the Chemically Dependent . . . . .	.2
CHD 150	Principles of Self-Help Groups 2	
CHD 161	Beginning Interviewing & Documentation Skills . . . . .	.3
ENG 102	English Composition II . . . . .	.3

**OR**

ENG 136	Report Writing . . . . .	.3
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**Spring Year One Total Credits . . . . . 16**

### Fall Year Two

CHD 165	Theory and Tech. in the Treatment of the Chemically Dependent . . . . .	.2
CHD 220	Family Dynamics and Chemical Dependency . . . . .	.3
CHD 226	Counseling Multicultural and Diverse Populations . . . . .	.3
CHD 236	Recovery and Relapse of the Chemically Dependent . . . . .	.2
CHD 245	Dual Diagnosis . . . . .	.2
COM 121	Interpersonal Communication 3	

**Total Fall Year 2 Credit Hours . . . . . 15**

### Spring Year Two

CHD 250	Group Intervention with the	
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	Chemically Dependent . . . . .	.3
CHD 275	Adv. Theory and Tech. in the Treatment of the Chem. Dep. . . . .	.3
CHD 280	Chemical Dependency Practicum . . . . .	.6
PSY 234	Social Psychology . . . . .	.3

**Total Spring Year Two Credits . . . . . 15**

**Total Degree Credits . . . . . 61**

## Computer Information Systems

### Systems Administration - Associate of Applied Science

The Associate of Applied Sciences (AAS) degree in CIS Systems Administration can be used as a transfer block to Northern Arizona University for completion toward a BAS degree in Technology Management. This AAS also includes the Associate of Arts General Education Core (AGEC-A) requirements.

**Note:** Students may complete their degree with NAU through online classes. (NAU's Cultural Understanding requirements will be completed after transfer)

### General Education Special Requirements from the General Education AAS Checklist

#### Communication

ENG 101 and ENG 102 . . . . .	.6
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#### Critical Thinking and Reasoning

MAT 142 College Mathematics . . . . .	.3
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#### Global Awareness

*Choose two Humanities*

PHI 205 (satisfies 3 credits of NAU's Global Diversity Awareness . . . . .)	.3
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*Choose one other course from AGECE-A*

*Section C with a different prefix (not PHI) 3*

SOC 140 (satisfies 3 credits of NAU's Ethnic Diversity Awareness) . . . . .	.3
BUS 206 Micro Economics . . . . .	.3
BUS 207 Macro Economics . . . . .	.3

#### Technology

CIS 110 Introduction to CIS . . . . .	.3
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#### Science

*Choose two courses from Section E In the AGECE-A . . . . .*

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**Total General Ed Requirements . . . . . 35**

### Program Requirements

CIS 115	Microcomputer Repair I . . . . .	.3
CIS 116	Microcomputer Repair II . . . . .	.3
CIS 120	Introduction to Programming . . . . .	.3
CIS 143	Introduction to Web Page Design . . . . .	.3
CIS 153	Networking Essentials . . . . .	.3
CIS 210	Database Management . . . . .	.3
CIS 253	Network Security . . . . .	.3
CIS 270	Systems Analysis and Design . . . . .	.3

*Choose 6 credits of the following:*

CIS 204	Programming &Game Development in C++ . . . . .	.3
CIS 206	Programming for the Web with JavaScript . . . . .	.3
CIS 208	Programming in C# . . . . .	.3

**Total Program Requirements . . . . . 30**

**Total Degree Credits . . . . . 65**

## Computer Graphics and Web Design

### - Associate of Applied Science

This degree will prepare students to design and develop Web sites and use graphic software for publications and professional digital imaging. While many courses are offered in a traditional classroom setting, this degree may also be obtained by taking all of your coursework online.

### Degree Requirements

BUE 105	Business English . . . . .	(3)
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**OR**

ENG 101	English Composition I . . . . .	.3
BUS 204	Business Communication . . . . .	.3
BUE 110	Business Math . . . . .	.3
CIS 110	Intro to Computer Information Systems . . . . .	.3

CIS 153	Network Essentials. . . . .	.3
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BUS 206	Micro Economics . . . . .	(3)
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**OR**

BUS 207	Macro Economics . . . . .	.3
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BUS 161	Marketing . . . . .	.3
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**Total Foundation Credits . . . . . 21**

### Degree Emphasis Courses

CIS 131	MS Office . . . . .	.3
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CIS 140	InDesign Desktop Publishing . . . . .	.3
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CIS 143	Web Page Design I . . . . .	.3
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CIS 145	Photoshop I . . . . .	.3
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CIS 241	E-Commerce Technology . . . . .	.3
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ART 130 Survey of World Art I . . . . .3  
 ART 230 Survey of World Art II . . . . .3  
 BUE 101 Introduction to Business and Entrepreneurship. . . . .3  
 BUE 121 Retailing and Customer Service3  
 BUE 175 Business Ethics. . . . .3  
**Total Degree Emphasis Credits . . . . . 30**

**Capstone Courses**

CIS 243 Web Page Design II. . . . .3  
 CIS 245 Photoshop II . . . . .3  
 CIS 280 Internship. . . . .3  
**Total Capstone Credits . . . . .9**

**Total Degree Credits . . . . . 60**

**Network Support and Information Security**

**- Associate of Applied Science**

This Associate of Applied Science degree program is intended for students who plan work in technology support services. The course work emphasizes computer repair, network troubleshooting, information security and helpdesk support.

**Degree Requirements**

BUE 105 Business English . . . . .3

**OR**

ENG 101 English Composition I . . . . .3  
 BUS 204 Business Communications. . .3  
 BUS 206 Micro Economics . . . . .3

**OR**

BUS 207 Macro Economics . . . . .3  
 BUE 110 Business Math . . . . .3  
 CIS 110 Introduction to Computer Information Systems . . . . .3  
 CIS 120 Introduction to Programming .3  
 CIS 153 Networking Essentials . . . . .3

**Total Foundation Credits . . . . . 21**

**Degree emphasis courses**

CIS 115 Computer Repair I. . . . .3  
 CIS 116 Computer Repair II . . . . .3  
 CIS 135 MS Access . . . . .3  
 CIS 136 MS Excel. . . . .3  
 CIS 138 MS Word . . . . .3  
 CIS 141 MS PowerPoint . . . . .3  
 CIS 143 Web Page Design I. . . . .3  
 CIS 156 Firewalls and Intrusion Detection . . . . .3  
 CIS 253 Network Security . . . . .3  
 CIS 261 Computer Support Services .3  
**Total Degree Emphasis credits . . . . . 30**

**Capstone Courses**

CIS 210 Database Management

& SQL Design . . . . .3  
 CIS 270 Systems Analysis & Design .3  
 CIS 280 Internship . . . . .3  
**Total Capstone Credits . . . . .9**

**Total Degree Credits . . . . . 60**

**Computer Graphics and Web Design**

**- Certificate**

The Computer Graphics and Web Design Certificate prepares students for positions in business and industry, or positions that require enhanced knowledge of computer graphics, desktop publishing and Web page design. All courses satisfactorily completed in this certificate program will apply to the Associate of Applied Science degree in Computer Information Systems.

**Certificate Requirements**

CIS 110 Intro to Computer Information Systems . . . . .3  
 CIS 140 InDesign Desktop Publishing .3  
 CIS 143 Web Page Design I. . . . .3  
 CIS 145 Photoshop I . . . . .3

**Certificate Credits . . . . . 15**

**Elective Requirements**

*Choose 6 credits from the following*

CIS 206 Programming for Web with JavaScript . . . . .3  
 CIS 241 E-Commerce Technology . .3  
 CIS 243 Web Page Design II . . . . .3  
 CIS 245 Photoshop II. . . . .3

**Elective Credits . . . . .6**

**Total Certificate Credits . . . . . 18**

**Systems Support and Security**

**- Certificate**

The Systems Support and Security certificate provides students with the skills needed to function as technical and network support for an organization. General network troubleshooting and computer repair procedures will be covered along with basic security protocols.

**Certificate Requirements**

CIS 110 Introduction to Computer Information Systems . . . . .3  
 CIS 115 Computer Repair I . . . . .3  
 CIS 116 Computer Repair II . . . . .3  
 CIS 153 Networking . . . . .3  
 CIS 253 Network Security . . . . .3  
**Certificate Credits . . . . . 15**

**Elective Requirements**

*Choose one course from the following . . . . .*

CIS 131 MS Office . . . . .3  
 CIS 156 Firewalls and Intrusion Detection . . . . .3  
 CIS 261 Computer Support Services .3

**Elective Credits . . . . .3**

**Total Certificate Credits . . . . . 18**

**Professional Applications**

**- Certificate**

The Professional Applications Certificate provides students a working knowledge of a variety of software programs used in business today. All courses satisfactorily completed in this certificate program will apply to the Associate of Applied Science degree in Business Administration or Computer Information Systems.

**Certificate Requirements**

*Choose 5 courses or 15 credits in any combination from the following:*

CIS 135 Microsoft Access Database .3  
 CIS 136 Microsoft Excel . . . . .3  
 CIS 138 Microsoft Word . . . . .3  
 CIS 140 InDesign Desktop Publishing .3  
 CIS 141 Microsoft PowerPoint Presentations . . . . .3  
 CIS 143 Web Page Design I. . . . .3  
 CIS 145 Photoshop I . . . . .3  
 CIS 243 Web Page Design II . . . . .3

**Requirement Credits . . . . . 15**

**Elective Options**

*Choose any CIS 100 or above course as an elective.*

**Elective Credits . . . . .3**

**Total Certificate Credits . . . . . 18**



## Programs of Study

### Programming and Game Development

#### – Certificate

The Programming and Game Development Certificate prepares students to work as part of a programming and/or game application development team. Skills in the most commonly used programming languages will be developed and students will gain practice in systems theory, logic and design common to all programming languages. All courses successfully completed in this certificate program can apply to the Associate of Applied Science Degree in Computer Information Systems.

#### Program Requirements

CIS 110	Intro to Computer Information Systems . . . . .	.3
CIS 120	Introduction to Programming . . . . .	.3
<i>Choose 4 courses from the following:</i>		
CIS 125	Basic Game Design and Creation. . . . .	.3
CIS 200	Programming & Game Design in Visual Basic.NET . . . . .	.3
CIS 204	Programming & Game Design in C++. . . . .	.3
CIS 206	Programming for the Web in JavaScript . . . . .	.3
CIS 208	Programming in C# . . . . .	.3
CIS 243	Web Page Design II . . . . .	.3

**Total Certificate Credits . . . . . 18**

### Computer Information Systems

#### - Associate of Business - SR

This degree prepares students to transfer to an Arizona university to pursue a bachelor's degree in Computer Information Systems or Management Information Systems. The program requirements differ between universities and the official transfer guide located at [www.AZTransfer.com](http://www.AZTransfer.com). An advisor should be consulted in order to include any additional requirements of each university.

#### General Education Credits . . . 35-37

See the General Education Core Requirements section (AGEC-B) of this catalog for details.

#### Special Requirements for the AGECEC-B

BUS 206	Microeconomics . . . . .	(3)
BUS 207	Macroeconomic . . . . .	(3)

#### Additional Requirements (U of A only)

After consulting with an advisor, choose a 4 credit-hour language (not English) course from the transferable course chart.

#### Quantitative Methods

Consult an advisor or see the Business Major Guide located on [www.AZTransfer.com](http://www.AZTransfer.com) for university specific quantitative requirements.

(NAU or U of A only)

MAT 201	Finite Mathematics . . . . .	.3
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#### OR

(ASU – only)

MAT 231	Analytic Geometry & Calculus II. . . . .	.4
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**Quantitative Methods Requirements . . .3-4**

#### Degree Requirements

ACC 125	Introduction to Accounting Using QuickBooks. . . . .	.4
BUS 202	Legal Environment of Business . . . . .	.3
BUS 221	Financial Accounting . . . . .	.3
BUS 222	Managerial Accounting . . . . .	.3
CIS 120	Introduction to Programming . . . . .	.3
CIS 208	Programming in C# . . . . .	.3
CIS 270	Systems Analysis and Design . . . . .	.3
BUS 208	Business Statistics . . . . .	.3
<b>Total Degree Requirements. . . . .</b>		<b>25</b>

**Total Degree Credits . . . . . 63-66**

## Culinary Arts and Hospitality

### Culinary Arts and Hospitality

#### - Associate of Applied Science

The Culinary Arts and Hospitality program offers a strong balance between the technical hands-on training in culinary techniques, the theoretical training, and the general education core values required to succeed in food service and hospitality management. The courses are offered on a year-round basis.

#### General Education Special Requirements

ENG 101	English Composition I . . . . .	.3
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#### OR

BUE 105	Business English . . . . .	.3
COM 151	Public Speaking . . . . .	.3

BUE 175	Business Ethics. . . . .	.3
PSY 101	Introductory Psychology. . . . .	.3
CIS 110	Introduction to Computer . . . . .	.3
	Information Systems . . . . .	.3

#### OR

CIS 131	Microsoft Office Suite. . . . .	.3
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**Total General Education Credits . . . 15-17**

#### Program Requirements

CUL 111	Introduction to Culinary . . . . .	.4
CUL 112	Techniques of Healthy Cooking . . . . .	.4
CUL 113	Saucier . . . . .	.4
CUL 114	Baking. . . . .	.4
CUL 115	Sanitation and Safety . . . . .	.3
CUL 116	Supervisory Management . . . . .	.3
CUL 117	Purchasing and Receiving . . . . .	.3
CUL 118	Hospitality and Culinary Marketing . . . . .	.3
CUL 119	Externship . . . . .	.3
CUL 211	Food and Beverage . . . . .	.3
	Cost Control . . . . .	.3
CUL 212	American Regional Cuisine . . . . .	.4
CUL 213	International Cuisine. . . . .	.4
CUL 214	Hospitality and Culinary Law . . . . .	.3

**Total Program Requirements . . . . . 45**

**Total Degree Credits . . . . . 60-62**

### Baking and Pastry

#### -Certificate

CUL 111	Introduction to Culinary . . . . .	.4
CUL 112	Techniques of Healthy Cooking . . . . .	.4
CUL 114	Baking. . . . .	.4
CUL 115	Sanitation & Safety. . . . .	.3
CUL 116	Supervisory Management . . . . .	.3
CUL 215	Artisan Breads . . . . .	.4
CUL 216	Advanced Baking & Pastry . . . . .	.4
CUL 217	Chocolate, Confections, Sugar . . . . .	.4

**Total Certificate Credits . . . . . 30**

### Culinary Arts and Hospitality

#### - Certificate

The Culinary Arts and Hospitality program offers a strong balance between the technical hands-on training in culinary techniques and the theoretical training required to succeed in food service and hospitality management.

#### Certificate Requirements

CUL 111	Introduction to Culinary . . . . .	.4
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## Electrical Technology

### - Associate of Applied Science

Prepares graduates to enter the electrical field with skills in electrical theory, maintenance and installation necessary to be successful residential and industrial technicians. Topics of study will include residential and industrial electricity, power distribution systems, electric motors and controls, and low-voltage system installation and maintenance. Students will learn to work in teams and develop the appropriate communications skills necessary to be successful in the workplace. Workplace safety will be emphasized throughout the program of study.

**General Education Special Requirements from the General Education AAS Checklist. . . . . 15-17**

**Building Trades Requirements**  
 BTR 100 Blueprint Reading . . . . . 3  
 BTR 105 Basic Trades Safety. . . . . 3  
**Building Trades Credits . . . . . 6**

**Additional Requirements**  
 BUE 101 Introduction to Business & Entrepreneurship. . . . . 3  
 BUE 102 Human Behavior in the Workplace. . . . . 3  
 BUE 120 Managing & Supervising Techniques . . . . . 3  
 BUE 175 Business Ethics. . . . . 3

**Total Additional Requirements . . . . . 18**

**Program Requirements**  
 ELC 110 Residential Wiring I . . . . . 3  
 ELC 111 Residential Wiring II . . . . . 3  
 ELC 112 Electrical Calculations . . . . . 2  
 ELC 115 AC/DC Theory . . . . . 3  
 ELC 120 NEC Codes for Residential. . . 3  
 ELC 210 Commercial/Industrial Electricity I. . . . . 3  
 ELC 211 Commercial/Industry II . . . . 3  
 ELC 220 Electrical Motors & Controls. . 3  
 ELC 200 Grounding & Bonding. . . . . 2  
**OR**  
 ELC 205 Relay Control Systems . . . . . 3  
 ELC 221 Low Voltage Systems. . . . . 3  
 ELC 225 NEC Codes for Commercial . . 3  
**Total Program Credits. . . . . 31-32**

**Total Degree Credits . . . . . 64-67**

## Electrical Technology Electrician

### - Certificate

Graduates of the Electrician Certificate are provided with the skills necessary to be successful as electricians in the workplace. Topics of study will include residential and industrial electricity, power distribution systems, electric motors and controls, and low-voltage system installation and maintenance. Students will be provided with opportunities to work in teams and develop appropriate communications skills necessary to be successful in the workplace. Workplace safety will be emphasized throughout the program of study.

**Program Requirements**  
 BTR 100 Blueprint Reading . . . . . 3  
 BTR 105 Basic Trades Safety. . . . . 3  
 ELC 110 Residential Wiring I . . . . . 3  
 ELC 111 Residential Wiring II . . . . . 3  
 ELC 112 Electrical Calculations. . . . . 2  
 ELC 115 AC/DC Theory . . . . . 3  
 ELC 120 NEC Codes for Residential. . . 3  
 ELC 210 Commercial/Industrial I. . . . 3  
 ELC 211 Commercial/Industrial II. . . . 3  
 ELC 200 Grounding & Bonding. . . . . 2  
**OR**  
 ELC 205 Programmable Logic Controllers. . . . . 3  
 ELC 220 Electrical Motors & Controls. . 3  
 ELC 221 Low Voltage Systems. . . . . 3  
 ELC 225 NEC Codes for Commercial . . 3

**Total Certificate Credits . . . . . 37-38**

## Electrical Technology Industrial Maintenance

**- Certificate**  
 Prepares graduates for employment in electrical installation and maintenance as required in an industrial setting, and is designed for individuals who have electrical workplace experience or who have completed the Residential Wiring Certificate. Students who have not previously completed an electrical program of study will be required to demonstrate their previous experience through certificates and/or letters of references from employers. Students will learn industrial troubleshooting and installation processes, the use of industrial motors and controls, as well as programmable logic controllers.

**Certificate Requirements**  
 ELC 115 AC/DC Theory . . . . . 3  
 ELC 210 Commercial/Industrial I . . . . 3  
 ELC 211 Commercial/Industrial II. . . . 3  
 ELC 200 Grounding & Bonding . . . . (2)  
**OR**  
 ELC 205 Relay Control Systems . . . . . 3  
 ELC 220 Electrical Motors & Controls. . 3

**Total Certificate Credits . . . . . 14-15**

## Electrical Technology Residential Wiring

**- Certificate**  
 Prepares graduates for entry-level employment as a residential wiring installer. Graduates will learn the proper techniques for wiring residential applications, including the use of the NEC codebook for residential electrical installations.

**Certificate Requirements**  
 BTR 100 Blueprint Reading . . . . . 3  
 ELC 110 Residential Wiring I . . . . . 3  
 ELC 111 Residential Wiring II. . . . . 3  
 ELC 112 Electrical Calculations. . . . . 2  
 ELC 115 AC/DC Theory . . . . . 3  
 ELC 120 NEC Codes for Residential. . . 3

**Total Certificate Credits . . . . . 17**

## Fire Science

**- Associate of Applied Science**  
 The Associate of Applied Science in Fire Science is for students who expect to further his or her career in the fire service or related fields. The Fire Science program offers students command development and continuing education courses.

*Note:* A "C" or better is required in all classes. Completion of all three Fire Science Certificates and the General Education credits is required for the Associate of Applied Science Degree.

**AAS General Education Credits**  
 See the AAS General Education Core Requirements section of this catalog for details.

**Special Requirements**  
 ENG 101 English Composition I . . . . . 3

## Programs of Study

ENG 102	English Composition II. . . . .	3
MAT 151	College Algebra . . . . .	3
<i>Choose one (1) below or higher level</i>		
BIO 100	Biology Concepts . . . . .	(4)
CHM 130	Fundamental Chemistry . . . . .	4
PHY 107	Conceptual Physics . . . . .	(4)
<b>Global Awareness Course. . . . . 3-4</b>		
<b>Technology Course . . . . . 3</b>		

**Total General Education Credits . . 19-20**

**Program Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 220	Occupational Safety & Health for the Fire Service . . .	3
FSC 131	Fire Protection Hydraulics . . . and Water Supply . . . . .	4
FSC 133	Fire Prevention . . . . .	3
FSC 233	Building Construction for Fire Protection . . . . .	3
FSC 235	Fire Strategy / Tactics. . . . .	3
FSC 221	Fire Administration I. . . . .	3
FSC 222	Fire Protection Systems . . . . .	3
FSC 223	Legal Aspects of the . . . . . Fire Service . . . . .	3
FSC 242	Fire Investigation I. . . . .	3
<b>Program Credits . . . . .</b>		<b>44</b>

**Total Degree Credits . . . . . 63-64**

**Fire Science -  
Fire Fighter  
- Certificate**

The Fire Fighter Certification Program is designed to either prepare a student for a career in the fire service or to enhance the knowledge and skills of an individual who is already employed as a fire fighter.

**Certificate Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 220	Occupational Safety & Health for the Fire Service. . .	3
<b>Total Certificate Credits . . . . .</b>		<b>19</b>

**Fire Science -  
Driver/Operator  
- Certificate**

The Driver/Operator Certificate Program is designed to prepare a student for advancement within the fire service to the position of driver/operator.

**Certificate Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Fighter Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 131	Fire Protection Hydraulics and Water Supply . . . . .	4
FSC 133	Fire Prevention . . . . .	3
FSC 220	Occupational Safety & Health for the Fire Service . . .	3
FSC 233	Building Construction for Fire Protection. . . . .	3
FSC 235	Fire Strategy/Tactics . . . . .	3
<b>Total Certificate Credits . . . . .</b>		<b>32</b>

**Fire Science -  
Fire Officer  
- Certificate**

The Fire Officer Certificate Program designed to prepare a student for company and officers positions within the fire service.

**Certificate Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Fighter Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 131	Fire Protection Hydraulics and Water Supply . . . . .	4
FSC 133	Fire Prevention . . . . .	3
FSC 220	Occupational Safety & Health for the Fire Service. . .	3
FSC 221	Fire Administration I. . . . .	3
FSC 222	Fire Protection Systems . . . . .	3
FSC 223	Legal Aspects of the Fire Service . . . . .	3
FSC 233	Building Construction for Fire Protection . . . . .	3
FSC 235	Fire Strategy / Tactics. . . . .	3
FSC 242	Fire Investigation I. . . . .	3
<b>Total Certificate Credits . . . . .</b>		<b>44</b>

## Heating, Ventilation & Air Conditioning (HVAC)

### Refrigeration Technology

**- Associate of Applied Science**

The Associate of Applied Science Degree in Refrigeration Technology is designed to provide training in residential heating, ventilation and air conditioning systems, as well as training in commercial HVAC, and commercial and domestic refrigeration systems. Topics will include safety and OSHA, refrigeration theory, residential HVAC installation, systems troubleshooting and repair, advanced electrical and electronic diagnosis and repair, commercial air management, hydronics and computerized energy management systems.

**General Education Credits . . . . . 15-17**

*Choose courses from the AAS General Education Checklist*

**Building Trades Requirements**

BTR 100	Blueprint Reading . . . . .	3
BTR 105	Basic Trades Safety. . . . .	3
BTR 121	Estimating for Residential and Commercial Bldg . . . . .	3
<b>Building Trade Credits . . . . .</b>		<b>9</b>

**Additional Requirements**

BUE 101	Introduction to Business & Entrepreneurship. . . . .	3
BUE 102	Human Behavior in the Workplace. . . . .	3
BUE 110	Managing & Supervising Techniques . . . . .	3
GBS 121	Customer Service . . . . .	3
BUE 175	Business Ethics. . . . .	3
<b>Additional Credits . . . . .</b>		<b>15</b>

**Elective Options**

*Choose 6 credits from BUS, CIS, or any trades prefix.*

**Elective Credits . . . . . 6**

**Program Requirements**

HVA 105	Fundamentals of Refrigeration	3
HVA 110	EPA Test Prep . . . . .	1

## Programs of Study

taken as part of the AGEC-S as special requirements for this degree.

MAT 221 Analytic Geometry & Calculus I  
CHM 151 General Chemistry I  
CHM 152 General Chemistry II

### Mathematics Requirement

MAT 231 Analytic Geometry  
and Calculus II. . . . . .4

**Total Mathematics Requirement . . . . .4**

### Science Requirement

CHM 235 General Organic Chemistry I .4  
CHM 236 General Organic Chemistry II .4  
PHY 115 University Physics I . . . . .5  
PHY 116 University Physics II . . . . .5  
**Total Science Requirements . . . . .18**

### Elective Options

*After consulting with an advisor, choose 3 credits from the transferable course chart, excluding courses already taken for the AGEC or for this degree.*

**Elective Credits . . . . .3**

**Total Degree Credits . . . . .62-63**

## English

### - Associate of Arts

The Associate of Arts – English degree will provide a student transfer credit to a university with English as the area of concentration. This program includes studies with both literature and writing. Students wishing to transfer to four-year institutions will have the academic foundations applicable to various fields such as journalism, creative writing, communications, teaching and literature studies.

**General Education Credits . . . . .35-37**

See the General Education Core Requirements (AGEC-A) section of this catalog for details.

### English Requirements

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*  
ENG 136 Report Writing . . . . .3  
ENG 137 Introduction to Literature . . .3  
ENG 138 Creative Writing I. . . . .3  
ENG 233 English Literature I . . . . .3  
ENG 234 English Literature II . . . . .3  
ENG 235 American Literature I . . . . .3  
ENG 236 American Literature II. . . . .3  
ENG 238 Writing Fiction . . . . .3  
**Total English Requirements . . . . .15**

### Elective Options

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses already taken for the AGEC.*

**Elective Credits . . . . .12-15**

**Total Degree Credits . . . . .62-67**

## Geology

### - Associate of Science

Students completing the AS-Geology will have the academic foundation and experience needed for transfer to a university geology degree program.

**General Education Credits . . . . .37-38**

See the General Education Core Requirements section (AGEC-S) of this catalog for details.

### Special Requirements for the AGEC-S

CHM 151 General Chemistry I . . . . .(4)  
CHM 152 General Chemistry II . . . . .(4)

### Mathematics Requirement

MAT 231 Analytic Geometry  
and Calculus II. . . . . .4

**Total Mathematics Requirement . . . . .4**

### Science Requirements

GLG 101 Physical Geology . . . . .4  
GLG 102 Historical Geology. . . . .4  
PHY 115 University Physics I . . . . .5  
PHY 116 University Physics II . . . . .5  
**Total Science Requirements . . . . .18**

### Elective Options

*After consulting with an advisor, choose 3 credits from the transferable course chart, excluding courses already taken for the AGEC-S or for this degree.*

**Elective Credits . . . . .3**

**Total Degree Credits . . . . .62-63**

## History

### - Associate of Arts

The Associate of Arts - History will provide a student with an instrument to carry transfer credit to a university and declare history as the area of concentration. The program includes global and United States history, with an emphasis on cultural diversity, and provides the students with the basics in history that are valuable at the university level.

**General Education Credits . . . . .35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

### History Requirements

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*  
HIS 131 History of the United States I .3  
HIS 132 History of the United States II .3  
HIS 135 Western Civilization I . . . . .3  
HIS 136 Western Civilization II . . . . .3  
HIS 234 History of Indians of  
North America. . . . .3  
HIS 274 History of Mexico . . . . .3  
HIS 281 Latin American History . . . .3  
**Total History Credits . . . . .15**

### Elective Options

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . .12-15**

**Total Degree Credits . . . . .62-67**

## Liberal Arts

### - Associate of Arts

The Associate of Arts degree in Liberal Arts is designed for the student who wishes to earn a well-rounded education by studying general subjects or choosing a particular area of emphasis.

**General Education Credits . . . . .35-37**

See the General Education Core Requirements Checklist (AGEC-A) of this catalog for details.

### Elective Options

*After consulting with an advisor, choose 27 credits from the transferable course chart, excluding courses already used for the AGEC.*  
**Elective Credits . . . . .27**

**Total Degree Credits . . . . .62-64**

*Note: If you are earning or have earned an Associate of Applied Sciences (AAS) degree in a particular field, you may not earn an AA degree with that same emphasis. If you are earning or have earned an AA degree with an emphasis, you may not earn an AAS degree in that same field. See your local campus advisor for a complete listing of applicable emphasis prefixes.*

**Science Requirements**

BIO 181 General Biology I . . . . . 4  
 BIO 182 General Biology II . . . . . 4  
 CHM 235 General Organic Chemistry I .4  
 CHM 236 General Organic Chemistry II .4  
**Total Science Requirements . . . . . 16**

**Elective Options**

*After consulting with an advisor, choose 6 credits from the transferable course chart, excluding courses already taken for the AGEC-S or for this degree.*

**Elective Credits . . . . . 6**

**Total Degree Credits . . . . . 63-64**

**Mathematics**

**- Associate of Arts**

The Associate of Arts - Mathematics is designed for the student who wishes to obtain a broad background in mathematics prior to transferring to a college or university.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

**Math Requirements**

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

MAT 160 Math for Elementary Teacher I . . . . . 3  
 MAT 161 Math for Elementary Teacher II . . . . . 3  
 MAT 181 Plane Trigonometry . . . . . 3  
 MAT 201 Finite Mathematics . . . . . 3  
 MAT 211 Introductory Statistics . . . . . 3  
 MAT 212 Brief Calculus . . . . . 4  
 MAT 221 Analytic Geometry and Calculus I . . . . . 4  
 MAT 231 Analytic Geometry and Calculus II. . . . . 4  
 MAT 241 Analytic Geometry and Calculus III . . . . . 4  
 MAT 260 Introduction to Differential Equations . . . . . 4  
**Total Math Requirement Credits . . . . . 15**

**Elective Options**

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

**Science**

**- Associate of Science**

This emphasis area is designed to assist students in transferring to a four-year degree program in science, engineering or pre-professional health science programs (i.e., pre-med, pre-dental, pre-veterinary). This emphasis area allows a flexibility of courses allowing students to tailor coursework to meet the specific requirements of the institution to which they intend to transfer. Courses should be selected with the assistance of an advisor.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

**Science Requirements**

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

BIO 181 General Biology I . . . . . 4  
 BIO 182 General Biology II . . . . . 4  
 BIO 201 Anatomy and Physiology I . . .4  
 BIO 202 Anatomy and Physiology II . .4  
 BIO 205 Microbiology . . . . . 4  
 BIO 290 Field Biology I . . . . . 1  
 BIO 291 Field Biology II . . . . . 1  
 CHM 151 General Chemistry I . . . . . 4  
 CHM 152 General Chemistry II. . . . . 4  
 CHM 235 General Organic Chemistry I .4  
 CHM 236 General Organic Chemistry II .4  
 ENV 101 Environmental Science . . . .4  
 GHY 212 Introduction to Meteorology .4  
 GHY 213 Climate Studies . . . . . 4  
 GLG 101 Physical Geology . . . . . 4  
 GLG 102 Historical Geology. . . . . 4  
 GLG 110 Environmental Geology/. . . .  
     Natural Disaster . . . . . 4  
 PHY 111 General Physics I . . . . . 4  
     **AND**  
 PHY 112 General Physics II . . . . . 4  
     **OR**  
 PHY 115 University Physics I . . . . . 5  
     **AND**  
 PHY 116 University Physics II . . . . . 5  
**Total Science Credits . . . . . 15-16**

**Elective Options**

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

**Social & Behavioral Science**

**- Associate of Arts**

The Associate of Arts Social and Behavioral Science Emphasis degree is a multi-disciplinary program, which provides students wishing to transfer to four-year institutions with the academic foundations applicable to the fields of sociology and psychology.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

**Social & Behavioral Science Requirements**

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

PSY 135 Human Sexuality . . . . . 3  
 PSY 232 Psychology of Adjustment . . .3  
 PSY 234 Social Psychology . . . . . 3  
 PSY 240 Child Growth and Development . . . . . 3  
 PSY 245 Lifespan Development. . . . . 3  
 PSY 260 Introduction to Personality. . .3  
 PSY 270 Abnormal Psychology . . . . . 3  
 SOC 132 Social Problems in Modern Society . . . . . 3  
 SOC 133 Sociology of Deviant Behavior. . . . . 3  
 SOC 136 Marriage and Family. . . . . 3  
 SOC 140 Racial, Ethnic and Gender Relations . . . . . 3  
 WST 101 Introduction to Women's Studies . . . . . 3

**Degree Requirements. . . . . 15**

**Elective Options**

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

**Social Studies**

**- Associate of Arts**

The Associate of Arts Social Studies Emphasis will provide a student transfer credit to a university with social studies as the area of concentration. The program includes both global and United States history, cultural diversity, government and

to the Medical Assistant Certificate and AAS Degree.

**Certificate Requirements**

HES 113	Medical Terminology . . . . .	.3
HES 128	Pharmacology: Allied Health Occupations . . . . .	.3
HES 129	Allied Health Anatomy & Physiology . . . . .	.3
MEA 100	Medical Law and Ethics . . . . .	.3
MEA 140	Medical Coding . . . . .	.3
MEA 141	Medical Billing . . . . .	.3
MEA 203	Disease Conditions . . . . .	.3
CIS 131	Microsoft Office Suite . . . . .	.3

**Total Certificate Credits . . . . . 24**

**Medical Assisting  
Phlebotomy  
- Certificate**

The phlebotomy certificate prepares our students to sit for the National Registry offered through the American Medical Technologist certification agency.

**Certificate Requirements**

HES 113	Medical Terminology . . . . .	.3
HES 129	Allied Health Anatomy & Physiology . . . . .	.3
MEA 100	Medical Law and Ethics . . . . .	.3
MEA 101	Phlebotomy Techniques . . . . .	.4
MEA 102	Phlebotomy Externship . . . . .	.3
CIS 131	Microsoft Office Suite . . . . .	.3

**Total Certificate Credits . . . . . 19**

**Nursing  
Registered Nursing - RN  
- Associate of Applied Science**

This program is designed to prepare students for a career as a registered nurse. Students must have completed the prerequisites described below before applying for admission to this program. Students successfully completing the program will be eligible to take the national licensure examination for registered nurses. The program is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission.

**Prerequisite Requirements:**

1. Graduate of an accredited high



2. school or hold a GED certificate, be 18 years of age or older and demonstrate evidence of potential success in the community college, be a transfer student in good standing from another college or university.
2. Successful completion (with a "C" or better) of Fundamentals of Chemistry and a 100-level biology course. Acceptable college courses are:
  - a. BIO 100 Biology Concepts, BIO 181 General Biology or one semester of anatomy and physiology with lab. Students are given the opportunity to, by examination, to demonstrate competency in BIO 100. An examination will be available by appointment on each campus site. If competency is not demonstrated, the course must be taken.
  - b. CHM 130 Fundamentals of Chemistry or CHM 151 General Chemistry I
3. Completion of prerequisites for NUR 121 Nursing I:
  - BIO 201 Anatomy and Physiology I . . .4
  - BIO 202 Anatomy and Physiology II . .4
  - BIO 205 Microbiology . . . . . .4
  - ENG 101 English Composition I . . .3
  - MAT 100 level or higher . . . . .3-4
  - PSY 101 Introductory Psychology. . .3
4. College courses over ten (10) years old will not be accepted as credit for biology, chemistry or general education

5. science requirements.
5. GPA of 2.85 or above in all nursing prerequisites.
6. Acceptable score on the Test of Essential Academic Skills (TEAS) (57.3).
7. Copy of Department of Public Safety Fingerprint Card
8. Extra consideration is given to applicants with additional degree earned, Arizona residency, health care experience and positive references.

A completed application must be submitted for admission to the RN nursing program once the prerequisite courses have been completed. An application for admission may be obtained from any MCC campus academic advisor, at the Nursing Department (1795 Civic Center Blvd., Suite 104, Lake Havasu City, AZ 86403) or online at [www.mohave.edu](http://www.mohave.edu). Application to the Nursing Program is not a guarantee of admission. Call 928.505.3368 for further details.

**Application Requirements**

- Completed Nursing Application
- Three Professional References
- Official College Transcripts (See Admission Information Packet)
- Test of Essential Academic Skills (TEAS) results
- Verification of health care experience
- Verification of residency

# Programs of Study



- Copy of Department of Public Safety Fingerprint Clearance Card
- Completion of Program and NUR 121 prerequisites.

### Prerequisite Requirements

BIO 100 Biology Concepts . . . . .	.4
<b>OR</b>	
BIO 181 General Biology . . . . .	.4
CHM 130 Fundamentals of Chemistry . . . . .	.4
<b>OR</b>	
CHM 151 General Chemistry I . . . . .	.4
BIO 201 Anatomy and Physiology I . . . . .	.4
BIO 202 Anatomy and Physiology II . . . . .	.4
BIO 205 Microbiology . . . . .	.4
ENG 101 English Composition I . . . . .	.3
MAT 100 level or higher . . . . .	.3-4
PSY 101 Introductory Psychology . . . . .	.3
<b>Total Prerequisite Credits . . . . .</b>	<b>29-30</b>

### Program Requirements

#### Fall Year One

NUR 121 Nursing I . . . . .	.8
ENG 102 English Composition II . . . . .	.3
<b>Fall Credits Year One . . . . .</b>	<b>11</b>

#### Spring Year One

NUR 122 Nursing II . . . . .	.8
PSY 245 Lifespan Development . . . . .	.3
NUR 227 Pharmacology for Nursing . . . . .	.3
<b>Spring Credits Year One . . . . .</b>	<b>14</b>

#### Fall Year Two

NUR 221 Nursing III . . . . .	.8
NUR 228 Pharmacology for Nursing . . . . .	.1
Specialties . . . . .	.1
<b>Fall Credits Year Two . . . . .</b>	<b>9</b>

### Spring Year Two

NUR 222 Nursing IV . . . . .	.8
NUR 229 Advanced Pharmacology . . . . .	.1
<b>Spring Credits Year Two . . . . .</b>	<b>9</b>

**Total Degree Credits . . . . . 72-73**

### Requirements for Graduation

Passing all core nursing courses and corequisite courses with a "C" grade or better and an 85% predictability of passing the NCLEX.

### Health Policy for Nursing

Upon admission to the program, students will be required to:

1. Sign a waiver releasing the Department of Nursing and Mohave Community College from responsibility for injury or illness resulting from exposure to disease, medicines or treatments, and sign a release of medical information.
2. Present evidence of two-step tuberculosis testing within the past year.
3. Provide documentation of measles, mumps, rubella immunizations and a varicella titer.
4. Provide evidence of HBV vaccination series or declination.
5. Provide documentation of physical examination within the six-month period immediately prior to admission to nursing program demonstrating the student's ability to perform the essential functions of the profession with or

without reasonable accommodations.

6. Provide evidence of a negative drug screen.
7. Undergo a general background check required by clinical facilities.

## Practical Nursing-PN -Step-out Certificate

This certificate program in practical nursing provides an option for AAS Nursing students wishing to "step-out" of the RN program and gain employment as a Practical Nurse. Upon satisfactory completion of the program, the graduate receives a certificate of proficiency and is eligible to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN). Upon successful passage of the NCLEX-PN, the graduate is eligible to practice as a Licensed Practical Nurse in the state of Arizona.

Admissions requirements, prerequisites and health policy remain the same as RN.

NUR 121 Nursing I . . . . .	.8
NUR 122 Nursing II . . . . .	.8
NUR 123 Transition to Practical Nursing . . . . .	.3
<b>Total Certificate Credits . . . . .</b>	<b>19</b>

## Practical Nursing-PN -Certificate of Proficiency

This Practical Nursing Program is a step-up program designed to prepare students with prior healthcare experience (such as a Certified Nursing Assistant or an experienced Medical Assistant) to function as members of the healthcare team under the direction and supervision of a licensed physician and/or registered nurse in a variety of healthcare settings. Students gain understanding of physiological, psychological, pathological, and basic nursing care needs of medical surgical patients across the life span, pregnant and post-partum patients, neonates, infants, and children while maintaining a safe environment for patients and their families.

Upon satisfactory completion of the program, the graduate receives a certificate of proficiency and is eligible to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN). Upon successful passage of the NCLEX-PN, the graduate is eligible to practice as a Licensed Practical Nurse in the state of Arizona.

**Admission requirements are:**

Completion program admission package  
Must be a certified nursing assistant or equivalent. Health policy will be the same as for the RN program.

**Prerequisites for PN Certificate of Proficiency**

HES 113 Medical Terminology . . . . .3  
HES 129 Allied Anatomy Physiology . . .3

**OR**

BIO 201 Anatomy and Physiology I . . .4\*  
BIO 202 Anatomy and Physiology II . . .4\*

**Total Prerequisite Credits . . . . . 6-11**

\* BIO 201 Anatomy & Physiology I & BIO 202 Anatomy & Physiology II may be substituted for HES 129.

- Certified/Registered Medical Assistant may be considered upon student request, program review, and Director/Faculty approval

**Fall Semester I**

PNC 101 Fundamentals of Practical Nursing Practice . . . . .8  
PNC 120 Gerontology for Practical Nursing . . . . .3  
PNC 110 Pharmacology & Dosage Calculations for Practical Nurse . . . . .3

**Fall Semester I Credits . . . . . 14**

**Spring Semester II**

PNC 201 Medical Surgical Nursing for Practical Nursing . . . . .8  
PNC 130 Family Nursing for Practical Nursing . . . . .4

**Spring Semester II Credits . . . . . 12**

**Summer Semester III**

PNC 202 Medical Surgical for Practical Nursing II, Transition to Practical Nurse Practice . . . . .6

**Summer Semester III Credits . . . . . 6**

**Total Certificate Credits . . . . . 32**

**Nursing**

**LPN to RN Track**

**- Associate of Applied Science**

This track is designed to transition licensed practical nurses into a registered nurse career in two semesters. Students must have completed the prerequisite courses described below before acceptance

into the program. Students successfully completing the program will be eligible to take the national licensure examination for registered nurses. This track is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission.

**Admission Requirements**

A completed application must be submitted for admission to the LPN to RN Track.

An application may be obtained at any MCC campus from the any MCC campus academic advisor, at the Nursing Department (1795 Civic Center Blvd., Suite 104 Lake Havasu City, AZ, 86403) or online at www.mohave.edu. Call 928.505.3368 for more details.

**Prerequisites**

BIO 100 Biology Concepts (Can demonstrate competency) . . .4  
BIO 201 Anatomy and Physiology I . . .4  
BIO 202 Anatomy and Physiology II . . .4  
BIO 205 Microbiology. . . . .4  
ENG 101 English Composition I . . . .3  
ENG 102 English Composition II. . . .3  
PSY 101 Introductory Psychology . . .3  
PSY 245 Lifespan Development. . . .3  
MAT 100-level Mathematics . . . .3-4  
NUR 227 Pharmacology for Nursing. . .3  
NUR 137 Articulation to the Healing Community . . . .3

**Total Prerequisite Hours . . . . . 37-38**

**In addition the applicant must:**

1. Be a graduate of an approved/ accredited practical nursing program.
2. Provide a copy of current LPN license to gain credit for Nursing I and Nursing II (16 credits)
3. Have one year of experience as a practicing LPN in good standing.
4. If the applicant has been inactive in nursing for five years or more, the applicant must show evidence of successful completion of a refresher course within the past year.
5. Achieve an acceptable score on the Test of Essential Academic Skills (TEAS).

**Current LPN Licensure/Certificate . . . 16**

**Program Requirements**

**Fall**

NUR 221 Nursing III . . . . .8

NUR 228 Pharmacology for Nursing Specialties . . . . .1  
**Total Fall Credits . . . . . 9**

**Spring**

NUR 222 Nursing IV . . . . .8  
NUR 229 Advanced Pharmacology. . . .1  
**Spring Credits . . . . . 9**

**Total Degree Credits . . . . . 71-72**

**Nursing - Nurse Refresher Programs**

The RN and LPN Nurse Refresher Courses are designed to assist the nurse in updating knowledge and skills of current nursing theory and practice. The didactic work is offered online and a clinical component is necessary. The Nurse Refresher Program is approved by the Arizona State Board of Nursing.

An application for admission to the program may be obtained at any MCC campus academic advisor, at the nursing department at the address listed below or online at www.mohave.edu. 1795 Civic Center Blvd., Suite 104, Lake Havasu City, AZ 86403. Call 928.505.3368 for more details.

**Admission Requirements**

Ability to obtain a temporary practice license from the Arizona State Board of Nursing; current CPR card at health care provider level, signed preceptor agreement and required health data. Students must register through the Nursing Office.

NUR 135 PN Refresher. . . . .6  
**Total Credits PN Refresher . . . . . 6**

NUR 235 RN Refresher . . . . .9  
**Total Credits RN Refresher . . . . . 9**

**Nursing Accelerated Nursing for Paramedics**

**- Associate of Applied Science**

This program is designed to transition paramedics into a registered nurse career in three semesters beginning with summer



## Programs of Study

student must also have an acceptable background check and the physical requirements for the course. Applications and information are available on any MCC campus academic counselor, at the Nursing Department (1795 Civic Center Blvd., Suite 104, Lake Havasu City AZ 86403 or online at [www.mohave.edu](http://www.mohave.edu). Call 928.505.3368 for more details.

NUR 115 Nursing Assistant . . . . .6  
**Total Nursing Assistant Credits . . . . .6**

### Medication Assistant

This course provides basic background information and routine procedures that are essential for the safe administration of selected medications by experienced certified nursing assistants in a long term care facility. Content includes basic principles of medication administration, simple calculations, and categories of medications. Successful completion of the course and a "pass" on both the written and manual skills exam administered by the Arizona State Board of Nursing (AZBN) will meet the qualifications to become a certified medication assistant (CMA) and administer medications under the provisions of A.R.S. §32-1650, (Certified medication assistants; medication administration; delegation, at a long-term care facility under the supervision of a licensed nurse).

Worked as a certified nursing assistant for at least 6 months; have no outstanding complaints or restrictions on CNA certification

- Are at least 18 years old;
- Pass a screening math and reading comprehension test
- Earned a high school diploma, GED, or U.S. college or U.S. military credits or 12 years of education in an foreign country;
  - o If educated in a non-English speaking country, a score of 76 on the iBT (internet-based TOEFL) or 6.5 overall and 7.0 on the speaking portion of the International English Language Test Service Academic Examination (IELTS)

NUR 117 Medication Assistant Course . . .4  
**Total Medication Asst. Course Credits . . .4**

## Paralegal

### Paralegal - Associate of Applied Science

#### Program Requirements

#### Spring Year One

PAR 101 Legal Research and Writing I .3  
 PAR 102 Introduction to Paralegal Careers . . . . .3  
 PAR 103 Legal Ethics for Paralegals . . .3  
 ENG 101 English Composition I . . . . .3  
 MAT 121 Intermediate Algebra. . . . .4  
**Total Spring Credit Year One . . . . .16**

#### Fall Year One

PAR 104 Civil Law and Litigation . . . .3  
 PAR 105 Contract Law . . . . .3  
 PAR 106 Criminal Law and Procedure .3  
 ENG 136 Report Writing. . . . .3  
*Choose one Global Awareness course listed in AAS General Education Checklist*  
 Global Awareness Course. . . . . 3-4  
**Total Fall Credits Year One . . . . . 15-16**

#### Spring Year Two

PAR 107 Tort Law . . . . .3  
 PAR 108 Property Law and Real Estate Transactions . . . .3  
 PAR 201 Legal Research and Writing II . . . . .3  
 PAR 202 Wills, Trusts and Estates . . . .3  
 CIS 131 Microsoft Office Suite . . . . .3  
**Total Spring Credit Year Two . . . . . 15**

#### Fall Year Two

PAR 200 Law Office Technology . . . .3  
 PAR 203 Family Law . . . . .3  
 PAR 204 Corporation Law. . . . .3  
 PAR 205 Bankruptcy . . . . .3  
 ACC 125 Introduction to Accounting Using QuickBooks. . . . .4  
**Total Fall Credit Year Two . . . . . 16**

**Total Degree Credits . . . . . 62-63**

### Paralegal - Certificate

This certificate prepares students with an overview of the paralegal profession, learn the ethical rules for members of the legal community, learn how to conduct legal research and basic legal writing skills,

how to interpret legal documents, how to interpret case law, how to investigate the facts of a case, how to prepare a case for trial, how to analyze and handle procedural problems, and an overview of law from core courses. Use these skills to become a paralegal, title examiner, trust officer, contract clerk, legal investigator or law firm administrator; or as a foundation for further legal education including later enrollment in law school.

#### Certificate Requirements

PAR 101 Legal Research and Writing I . . . . .3  
 PAR 102 Introduction to Paralegal Careers . . . . .3  
 PAR 103 Legal Ethics for Paralegals . . .3  
 PAR 104 Civil Law and Litigation . . . .3  
 PAR 105 Contract Law . . . . .3  
 PAR 106 Criminal Law and Procedure .3  
 PAR 107 Tort Law . . . . .3  
 PAR 108 Property Law and Real Estate Transactions. . . . .3

**Total Certificate Credits . . . . . 24**

### Paralegal Post-Degree Paralegal - Certificate

This certificate is for students who have already earned a two or four-year degree and wish to transition their profession into the legal field.

#### Certificate Requirements

PAR 101 Legal Research and Writing I .3  
 PAR 102 Introduction to Paralegal Careers . . . . .3  
 PAR 103 Legal Ethics for Paralegals . . .3  
 PAR 104 Civil Law and Litigation . . . .3  
 PAR 105 Contract Law . . . . .3  
 PAR 106 Criminal Law and Procedure .3  
 PAR 107 Tort Law . . . . .3  
 PAR 108 Property Law and Real Estate Transactions . . . .3  
 PAR 200 Law Office Technology . . . .3  
 PAR 201 Legal Research and Writing II .3  
 PAR 202 Wills, Trusts and Estates . . . .3  
 PAR 203 Family Law . . . . .3  
 PAR 204 Corporation Law . . . . .3  
 PAR 205 Bankruptcy . . . . .3

**Total Certificate Credits . . . . . 42**

# Programs of Study

## Special Requirement for Critical Thinking and Reasoning

BIO 201 Anatomy and Physiology I . . . . .	.4
<b>Total General Education Credits . . . . .</b>	<b>.6</b>

## Additional Requirements

MEA 100 Medical Law and Ethics . . . . .	.3
BIO 202 Anatomy & Physiology II. . . . .	.4
<b>Total Additional Credits. . . . .</b>	<b>.7</b>

## Program Requirements

SGT 121 Orientation and Introduction to Surgery . . . . .	.2
SGT 122 Surgical Techniques . . . . .	.4
BIO 205 Microbiology for the Surgical Technologist . . . . .	.4
SGT 123 Pharmacology for Surgical Technology . . . . .	.1
SGT 221 Surgical Concepts . . . . .	.2
SGT 222 Surgical Procedures . . . . .	.6
SGT 223 Introduction to the Operating Room. . . . .	.2
SGT 224 Surgical Complications . . . . .	.4
SGT 225 Surgical Technology Externship I . . . . .	.7
SGT 226 Surgical Technology Externship II . . . . .	.7
<b>Total Program Credits. . . . .</b>	<b>.39</b>
<b>Total Degree Credits . . . . .</b>	<b>.69</b>

# Truck Driver Training

## Truck Driver Training - Certificate

Truck Driver Training Certificate will provide students with 150 hours of instruction with one-on-one, hands-on training to obtain a Commercial Drivers License (CDL) to begin the students' career in the transportation industry. The program includes an ongoing placement service and refresher training for program graduates. Students interested in the program should contact the program director on the Neal Campus-Kingman for further information, application to the program and cost. Courses are only available as part of the CDL training program and are not offered individually.

### Certificate Requirements

TDT 100 Basic Operation . . . . .	.2
TDT 110 Safe and Advanced Operating Practices . . . . .	.2
TDT 120 Vehicle Maintenance . . . . .	.1

TDT 130 Non-vehicle Activities . . . . .	.2
TDT 140 Preparation for CDL Written Exam . . . . .	.1

**Total Certificate Credits . . . . . 8**

## Refund Policy

Refunds for MCC's Truck Driver Training program are offered in conjunction with SAGE Corporation. SAGE applies the following refund policy to students who have paid required school charges (tuition, fees, etc.). A full refund will be provided to any student who cancels prior to starting class, or who terminates from the program for any reason up to the third day of classes. After the third day of classes, no refund shall be given. In the event of any refund, SAGE shall retain a processing fee of \$100.

# Welding Technology

## - Associate of Applied Science

This degree provides training in Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Gas Metal Arc Welding, Flux Core Arc Welding-Gas Shielded, Flux Core Arc Welding-Self Shielded and welding certifications for students to be employed as a welder.

### General Education Special Requirements from the General Education

AAS Checklist. . . . .	15-16
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### Communications . . . . . 6

ENG 101 English Composition. . . . .	.3
and ONE additional course from the COMMUNICATIONS section of the AAS General Education Checklist . . . . .	.3

### Critical Thinking and Reasoning

WLD 114 Math for Welders . . . . .	.3
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### Global Awareness. . . . . 3-4

Choose ONE from the GLOBAL AWARENESS off the AAS General Education Checklist. . . . .	.3-4
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### Technology . . . . . 3

CIS 110 Intro to Computer Information Systems or above . . . . .	.3
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## CORE REQUIREMENTS

Completion of Entry Level 1 Welder Certificate . . . . .	26
Completion of Entry Level II Welder Certificate . . . . .	23

*NOTE: WLD 105 is a requirement for both ENTRY LEVEL I and II Certificates.*

**Total Degree Credits . . . . . 62-65**

## Welding Technology Shielded Metal Arc (SMAW) -Certificate

This certificate prepares students to obtain entry-level positions in Shielded Metal Arc Welding.

### Certificate Requirements

BTR 105 Basic Trades Safety . . . . .	.3
WLD 102 Cutting Process & Welding Quality . . . . .	.3
WLD 105 Weld Fit Up/Inspection/ Metallurgy . . . . .	.2
WLD 114 Math for Welders . . . . .	.3
WLD 126 Gas Tungsten Arc Welding I . . . . .	.3
WLD 226 Gas Tungsten Arc Welding, Plate II. . . . .	.3
WLD 231 Blueprint Reading . . . . .	.3

**Total Certificate Credits: . . . . . 17**

## Welding Technology Gas Tungsten Arc Welding (GTAW) -Certificate

This certificate prepares students to obtain entry-level positions in Gas Tungsten Arc Welding.

### Certificate Requirements

BTR 105 Basic Trades Safety. . . . .	.3
WLD 114 Math for Welders . . . . .	.3
WLD 126 Gas Tungsten Arc Welding I . . . . .	.3
WLD 226 Gas Tungsten Arc Welding II . . . . .	.3
WLD 228 Gas Tungsten Arc Welding Pipe	

**Total Certificate Credits: . . . . . 18**

## Gas Metal Arc Welding (GMAW)

### -Certificate

This certificate prepares students to obtain entry-level positions in Gas Metal Arc Welding and Flux Core Arc Welding.

#### Certificate Requirements

BTR 105	Basic Trades Safety. . . . .	.3
WLD 102	Cutting Process and Welding Quality. . . . .	.3
WLD 105	Welding Fit Up/Inspection/Metallurgy . . . . .	.2
WLD 114	Math for Welders . . . . .	.3
WLD 129	Gas Metal Arc Welding . . . . .	.3
WLD 201	Flux Cored Arc Welding . . . . .	.3
WLD 231	Blueprint Reading . . . . .	.3

**Total Certificate Credits: . . . . . 20**



## Welding Technology Entry-Level I Welder -Certificate

This certificate includes basic welding concepts that will prepare students to obtain an entry-level position within the field.

#### Certificate Requirements

BTR 105	Basic Trades Safety. . . . .	.3
WLD 102	Cutting Process & Welding Quality . . . . .	.3
WLD 105	Weld Fit Up/Inspection/Metallurgy. . . . .	.2
WLD 114	Math for Welders . . . . .	.3
WLD 125A	SMAW Plate I . . . . .	.3
WLD 125B	SMAW Plate II . . . . .	.3
WLD 126	Gas Tungsten Arc Welding I . . . . .	.3
WLD 129	Gas Metal Arc Welding . . . . .	.3
WLD 231	Blueprint Reading . . . . .	.3

**Total Certificate Credits . . . . . 26**

## Welding Technology Entry-Level II Welder -Certificate

This certificate presents advanced welding concepts and techniques. This certificate will NOT BE AVAILABLE until the 2012-2013 Academic Year.

#### Certificate Requirements

WLD 105	Weld Fit Up/Inspection/Metallurgy. . . . .	.2
WLD 201	Flux Core Arc Welding Pipe . . . . .	.3
WLD 228	Gas Tungsten Arc Welding Pipe I . . . . .	.3
WLD 229	Gas Metal Arc Welding Pipe . . . . .	.3
WLD 261	SMAW Open V-Butts/Plate I . . . . .	.3
WLD 262	SMAW Open V-Butts/ Plate II . . . . .	.3
WLD 263	SMAW Open Root/Pipe I . . . . .	.3
WLD 264	SMAW Open Root/Pipe II . . . . .	.3

**Total Certificate Credits . . . . . 21-23**

*NOTES: Students must complete all requirements for Welding Level I and II before receiving the Welding Level II certificate.*

*WLD 261, WLD 262, WLD 263 and WLD 264 WILL NOT BE AVAILABLE until the 2012-2013 Academic Year.*

students' involvement in those aspects of theatre production.

## TRUCK DRIVER TRAINING

### TDT 100 | BASIC OPERATION (2) One lecture; two lab

*Prerequisite: Admission to program.*  
Covers basic operation of control systems, shifting and transmissions, basic vehicle control, coupling and uncoupling.

### TDT 110 | SAFE AND ADVANCED OPERATING PRACTICES (2) One lecture; two lab

*Prerequisite: Admission to program.*  
Covers special rigs, visual search, communications, speed and space management, night and extreme driving conditions, hazards, emergency maneuvers, skid control and recovery.

### TDT 120 | VEHICLE MAINTENANCE (1) One lecture

*Prerequisite: Admission to program.*  
Covers an understanding of vehicle systems, general and advanced preventive maintenance, diagnosis and reporting of malfunctions, managing/handling cargo distribution and cargo documentation.

### TDT 130 | NON-VEHICLE ACTIVITIES (2)

**Two lecture**  
*Prerequisite: Admission to program.*  
Covers managing/handling cargo, distribution and cargo documentation. Learning the importance of personal health, hygiene and safety. It will also cover customer and employer relations along with career planning to ensure their success in the transportation industry.

### TDT 140 | PREPARATION FOR CDL WRITTEN EXAM (1) One lecture

*Prerequisite: Admission to program.*  
Covers Arizona Commercial Drivers License requirements for combination vehicles, Hazmat, double or triples, and tank endorsements.

### TDT 150 | SPECIALIZED TRAINING (1) Course Fee: \$300 | One lecture

Designed to review skills for those who

have previously held a Commercial Driver's License and are renewing it, or for those with a current CDL who would want practice. It is not open to the general public.

## TRANSITIONAL STUDIES

### TRE 089 | TRANSITIONAL ENGLISH (3) Three lecture | *Prerequisite: Appropriate score on Compass test.*

An intensive review of the fundamentals of written and oral communication. Written communication review will include grammar, word usage, punctuation, and sentence, paragraph and essay structure culminating in a short research paper. Oral communications review will focus on presentation skills.

### TRM 090 | PRE-ALGEBRA (3) Three lecture | *Prerequisite: Appropriate score on assessment test.*

Bridging basic arithmetic and beginning algebra, this course integrates a review of arithmetic, negative numbers, fractions, ratio, proportion, percentage, simple geometry, unit analysis, and solving basic equations.

### TRM 091 | BEGINNING ALGEBRA (4) Four lecture | *Prerequisite: Successful completion of TRM 090 or appropriate score on assessment test.*

A beginning course in algebra including, linear equations and inequalities, basic graphing, systems of linear equations, polynomials, factoring, simple rational expressions and equations, integer exponents and simple radicals.

## WELDING TECHNOLOGY

### WLD 102 | CUTTING PROCESS AND WELDING QUALITY (3) Course Fee: \$108 | One lecture; three lab. *Corequisite: BTR 105*

Introduces oxy-fuel cutting (OFC), plasma arc cutting (PAC) and carbon arc cutting (CAC)

### WLD 105 | WELD FIT UP/ INSPECTION/METALLURGY(2) Course Fee: \$93 | Two lecture

Introduction to visual inspection, joint fit-up, welding symbols and metallurgy.

### WLD 114 | MATH FOR WELDERS (3) Three lecture *Prerequisite: Appropriate score on assessment test or successful completion of TRM 090.* Use basic mathematics skills in practical exercises useful in the welding field.

### WLD 125A | SHIELDED METAL ARC WELDING, PLATE I (3) Course Fee: \$108 | One lecture; three lab *Corequisite: BTR 105* Introduces SMAW welding and equipment; arc welding stringer beads on fillets in all positions.

### WLD 125B | SHIELDED METAL ARC WELDING, PLATE II (3) Course Fee: \$108 | One lecture; three lab *Prerequisite: Successful completion of WLD 125A* Introduces SMAW welding of quality V-groove welds with backing strap in all positions.

### WLD 126 | GAS TUNGSTEN ARC WELDING I, PLATE I (3) Course Fee: \$108 | One lecture; three lab *Corequisite: BTR 105* Introduces equipment setup and plate welding in the 1G & 2G positions, open root.

### WLD 129 | GAS METAL ARC WELDING (3) Course Fee: \$170 | One lecture; three lab. *Corequisite: BTR 105* A comprehensive study and application of Gas Metal Arc Welding & also emphasizes the safety practices and procedures used in the welding industry, as well as appropriate workplace skills also includes welding symbols, joint design, & control of distortion.

### WLD 156 | AWS Level 1 (Entry Level Welder) Certification Preparation (2) One lecture; two lab. *Prerequisite: Completion of any Welding Certificate plus completion of Entry Level I Welder Certificate or permission of instructor.* Prepares student for the nine part AWS national certification exam.

### WLD 157 | AWS LEVEL 1 CERTIFICATION (ENTRY LEVEL WELDER) PREPARATION AND



### Message from the President

After years of recession, we are starting to see signs of improvement in the economy. Although no one expects a rapid return to the prosperity and employment levels we saw at the beginning of the century, there are good signs.

Those who use their time now to prepare for a career in a secure, high-demand field, will be in position to take advantage of opportunities when the job market opens up again.

As you look through MCC's 2011-2012 catalog, you'll see many career and technical education programs that can prepare you for a new career.

These certificate and associate degree programs take one to three years to complete and are available at a much lower tuition and fee rate than the universities and private institutions charge.

You'll also see that MCC is your stepping stone to a bachelor's degree. The Associate of Arts, Business and Science degrees at MCC include classes that are equivalent to the lower-division college courses required during the first two years at the state universities in Arizona and at other transfer partner universities. Spending your first two years at MCC will save you more than \$12,000 in tuition and fees alone. Students who know they are going on for a bachelor's degree at any of the partner universities should coordinate their MCC class selection with a university advisor to assure all coursework transfers seamlessly.

With 8,000 Baby Boomers a day reaching retirement age, job opportunities will soon begin to open for those who have the education and training to secure positions vacated by the largest generation in history. Congratulations on having the wisdom and drive to seek the education you'll need to qualify.

Sincerely,

Michael J. Kearns  
President

#### MCC Mission Statement

The mission of Mohave Community College is to be a learning-centered college, serving all constituencies, inspiring excellence through innovative learning methodologies and empowering students to succeed.

#### MCC Vision Statement

Mohave Community College is recognized as the center of educational, cultural and civic activities by the communities it serves.

#### MCC Goals

**Educational:** Mohave Community College supports an academic learning-centered community through implementation of quality teaching initiatives, professional development, integration of learning technology, development of partnerships, delivery of effective student support services, and by providing accurate information and advising.

**Cultural:** Become a conduit between businesses, organizations, foundations and the arts to strengthen understanding of the world through education.

**Civic:** Promote active citizenship within the college community.

**Resources:** Provide resources needed to achieve the mission and vision.

#### MCC Accreditations

Mohave Community College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 N. LaSalle St., Suite 2400, Chicago, IL 60602-2504. 312.263.0456.

The Mohave Community College Nursing Program is accredited by The National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, Georgia 30326 404.975.5000, Fax 404.975.5020, www.nlnac.org. This program is also approved by the Arizona State Board of Nursing, 4747 N 7th St., Suite 150, Phoenix, AZ 85014. 602.331.8111.

The Mohave Community College Paramedic and Emergency Medical Technician programs are certified by

## Board of Governors



**Julie Bare,**  
District #3 Trustee,  
Board President



**Judy Selberg,**  
District #1 Trustee,  
Board Secretary



**Kathleen Hodel,**  
District #2 Trustee



**Travis Lingenfelter,**  
District #4 Trustee



**Vance Miller,**  
District #5 Trustee

the Arizona Department of Health Services Bureau of Emergency Medical Services, 150 North 18th Ave., Suite 540, Phoenix, AZ 85007. 602.364.3150.

The Mohave Community College Dental Hygiene Program is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312.440.4653, or at the American Dental Association, 211 East Chicago Ave., Chicago, IL 60611.

The Mohave Community College Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs [CAAHEP] in cooperation with the Accreditation Review Committee on Education in Surgical Technology.

The Mohave Community College Physical Therapist Assistant Program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax St., Alexandria, VA, 22314; 703.706.3245; accreditation@apta.org; www.capteonline.org.

### Equal Opportunity Policy Statement

Mohave Community College does not discriminate on the basis of sex, color, race, religious preference, age, disability, national origin, veteran status or any other legally protected class in any of its policies, practices, and procedures, and it is an affirmative action and equal opportunity employer. For more information, call the Human Resources Office at 928.757.0835, 1971 Jagerson Ave., Kingman, AZ 86409. Grievance procedures are available at the Mohave Community College libraries in Bullhead City, Colorado City, Kingman and Lake Havasu City.

### Americans with Disabilities Act (ADA)

Policy Statement Mohave Community College strives to facilitate, within reason, appropriate resources, services, and auxiliary aids to allow each qualified person with a documented disability equitable access to educational programs, social experiences and career opportunities. The vice president of administration, dean of student services and director of human resources act as ADA coordinators for the college to oversee compliance in the areas of facilities, student accommodations and employment practices.

### Diversity Statement

Mohave Community College is committed to providing equal employment opportunity, educational opportunity, and advancement to individuals without regard to race, color, religion, sex, national origin, age, mental or physical disability, sexual orientation, or veteran status or any other legally protected class in any of its policies, practices, or procedures. The equality of employment opportunity for all persons must be consonant with all applicable provisions of state and federal laws. The college shall promote equal opportunity and treatment on a continuing basis through a positive and ongoing affirmative action program.

### Safety on Campus

Mohave Community College is proud of its reputation as a "safe place to be." Safety requires constant vigilance by the college, students, staff and all those using college facilities or resources. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires MCC to disclose statistics on crimes committed on and near its campuses for the previous three years. A copy of this report is available at: <http://www.mohave.edu/safety>.

## MCC Values Statements

### 1. Building a Better Tomorrow through Learning

Learning is the core of the Mohave Community College mission. We acknowledge the importance of continuous learning to ensure the best possible future for everyone.

### 2. Accountability for the Future

The decisions made today affect individuals in the future. At Mohave Community College, we accept responsibility for our actions and decisions. We hold ourselves accountable to our students, our communities, and to the generations who come after us. MCC decisions will be designed to fulfill our vision for the future, aiming to achieve reliable, long-term improvements over short-term expediency.

### 3. Integrity

We remain committed to our values. Our decisions are consistently and courageously made in alignment with our convictions. We consciously foster an atmosphere of openness

and trust, making data-driven decisions that are balanced by a cultivated sense of compassion.

**4. Responsiveness**

We take pride in flexibly responding to our changing environment, promptly providing programs that are needed by our students and communities.

**5. Quality**

We aim for excellence in all that we do while embracing the concept of efficiency.

**6. Providing a Supportive Environment**

Mohave Community College is committed to student success. We show respect to all and work to overcome barriers to honesty, trust and sincerity. We take pride in providing friendly service to our students and communities.

**7. Having Fun**

We embrace the concept of having fun and finding joy in our work and services.

*This catalog presents the academic programs offered at MCC, specific areas of interest and course descriptions, and an outline of the steps necessary for enrollment at MCC.*

*The catalog does not establish a contractual relationship but it summarizes the total requirements which students must presently meet before qualifying for a faculty recommendation to the District Governing Board to award a degree or certificate.*

*Mohave Community College reserves the right to change, without notice, any materials, information, requirements, regulations, or fees published in this catalog.*

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## MCC Phone Directory/Campus Locations

### Academic Advising

BHC 928.758.3926  
LHC 928.505.3389  
NCK 928.757.0877  
NMC 928.875.2799  
DE 928.757.0867

### Adult Basic Education

BHC 928.758.2443  
LHC 928.505.3332  
NCK 928.692.3040  
NMC 928.875.2799

### ANGEL™ Assistance

1.866.749.8239

### Bookstore

BHC 928.704.9403  
LHC 928.680.5908  
NCK 928.692.3006  
NMC 928.875.2799

### Bursar's Office

928.692.3082

### Campus Switchboards

BHC 928.758.3926  
LHC 928.855.7812  
NCK 928.757.4331  
NMC 928.875.2799

### Career & Technical Education Coordinator

BHC 928.758.3926  
LHC 928.302.5326  
NCK 928.505.3389  
DE 928.757.0867

### Career Services

BHC 928.758.1406  
LHC 928.680.0633  
NCK 928.757.0864  
NMC 928.875.9105

### Computer Help Desk

1.855.757.5300

### Dental Hygiene

928.704.7797

### Distance Education

928.757.0867

### English Language Learners

BHC 928.704.7796  
NCK 928.692.3089

### Financial Aid

BHC 928.758.8407  
LHC 928.505.3389  
NCK 928.757.0855  
NMC 928.875.9116

### Academic Chair

BHC 928.704.9435  
LHC 928.505.3388  
NCK 928.692.3041  
DE 928.681.5649

### Human Resources

928.692.3074

### Library Services

BHC 928.758.2420  
LHC 928.435.5809  
NCK 928.757.0856  
NMC 928.875.2799

### Physical Therapist Assistant Program

LHC 928.505.3347

### Pre-College Studies

BHC 928.758.2420  
LHC 928.505.3332  
NCK 928.692.3040  
NMC 928.875.2799

### Registration by Phone

(Community Outreach Only)  
Toll-free 866.664.2832  
BHC 928.758.1139  
LHC 928.453.1139  
NCK 928.757.0839  
NMC 928.875.9105

### Registration Information

BHC 928.704.5092  
LHC 928.453.1139  
NCK 928.757.0839  
NMC 928.875.2799  
DE 928.757.0867

### Small Business Development Center (SBDC)

NCK 928.757.0894

### Student Services

BHC 928.704.9404  
LHC 928.505.3389  
NCK 928.757.0877  
NMC 928.875.9116  
DE 928.757.0867

### Surgical Technology

LHC 928.505.3374

### Testing Center

BHC 928.704.5089  
LHC 928.302.5321  
NCK 928.692.3046

### Transcripts

928.757.0847

### Tutoring

BHC 928.758.3926  
NCK 928.681.5642  
LHC 928.302.5342  
NMC 928.875.2799

### Veterans Educational Benefits

BHC 928.758.1406  
LHC 928.680.0633  
NCK 928.681.5668  
NMC 928.875.9116  
DE 928.692.3025

## Campus Locations

### Bullhead City Campus (BHC)

3400 Highway 95  
Bullhead City, AZ 86442

### Distance Education (DE)

1971 Jagerson Avenue  
Kingman, AZ 86409

### Lake Havasu City Campus (LHC)

1977 Acoma Blvd., West  
Lake Havasu City, AZ 86403

### Neal Campus - Kingman (NCK)

1971 Jagerson Avenue  
Kingman, AZ 86409

### North Mohave Campus (NMC)

480 S. Central  
Colorado City, AZ 86021



## Admission Information

New students, or students returning to MCC after more than a one-year absence, must complete the admission/readmission packet before registering.

All new students must provide evidence of U.S. citizenship/legal immigration status to be considered for in-state or Western Undergraduate Exchange (WUE) tuition rates or any Arizona state-based financial aid. This includes students enrolled in state grant supported adult education classes for the General Education Development (GED®) program or English Language Acquisition program.

The list of documents which may be used to prove U.S. citizenship or lawful immigration status can be found at [www.mohave.edu](http://www.mohave.edu) or by contacting the Enrollment Services Office at your local campus.

Arizona Revised Statutes that Pertain to Admission and Residency Status

Residency requirements are established by state statute and the Mohave Community College Governing Board. Please direct any questions regarding residency status to a local campus Enrollment Services Office. Students who have been determined not to meet state residency requirements will be assessed WUE or out-of-state tuition.

### Arizona Law (ARS §15-1801) Definitions

In this article, unless the context otherwise requires:

**1.** "Armed forces of the United States" means the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the commissioned corps of the United States Public Health Services, the National Oceanographic and Atmospheric Administration, the National Guard and any military reserve unit of any branch of the armed forces of the United States.

**2.** "Continuous attendance" means enrollment at an educational institution in this state as a full-time student, as such term is defined by the governing body of



the educational institution, for a normal academic year since the beginning of the period for which continuous attendance is claimed. Such person need not attend summer sessions or any other intersession beyond the normal academic year in order to maintain continuous attendance.

**3.** "Domicile" means a person's true, fixed and permanent home and place of habitation. It is the place where s/he intends to remain and to which s/he expects to return when s/he leaves without intending to establish a new domicile elsewhere.

**4.** "Emancipated person" means a person who is neither under a legal duty of service to his parent nor entitled to the support of such parent under the laws of this state.

**5.** "Parent" means a person's father or mother, or if one parent has custody, that parent, or if there is no surviving parent or the whereabouts of the parents are unknown, then a guardian of an unemancipated person if there are not circumstances indicating that such guardianship was created primarily for the purpose of conferring the status of an in-state student on such unemancipated person.

### Arizona Law (ARS §15-1802) In-State Student Status

**A.** Except as otherwise provided in this article, no person having a do-

micile elsewhere than in this state is eligible for classification as an in-state student for tuition purposes.

**B.** A person is not entitled to classification as an in-state student until the person is domiciled in this state for one year, except that a person whose domicile is in this state is entitled to classification as an in-state student if the person meets one of the following requirements:

**1.** The person's parent's domicile is in this state and the parent is entitled to claim the person as an exemption for state and federal tax purposes.

**2.** The person is an employee of an employer that transferred the person to this state for employment purposes or the person is the spouse of such an employee.

**3.** The person is an employee of a school district in this state and is under contract to teach on a full-time basis or is employed as a full-time noncertified classroom aide at a school within that school district. For the purposes of this paragraph, the person is eligible for classification as an in-state student only for courses necessary to complete the requirements for certification by the state board of education to teach in a school district in this state. No member of the person's family is eli-

## Attending MCC



gible for classification as an in-state student if the person is eligible for classification as an in-state student pursuant to this paragraph, unless the family member is otherwise eligible for classification as an in-state student pursuant to this section.

**4.** The person's spouse has established domicile in this state for at least one year and has demonstrated intent and financial independence and is entitled to claim the student as an exemption for state and federal tax purposes or the person's spouse was temporarily out of state for educational purposes, but maintained a domicile in this state. If the person is a noncitizen, the person must be in an eligible visa status pursuant to federal law to classify as an in-state student for tuition purposes.

**C.** The domicile of an unemancipated person is that of the person's parent.

**D.** Any unemancipated person who remains in this state when the person's parent, who had been domiciled in this state, removes from this state is entitled

to classification as an in-state student until attainment of the degree for which currently enrolled, as long as the person maintains continuous attendance.

**E.** A person who is a member of the armed forces of the United States and who is stationed in this state pursuant to military orders or who is the spouse or a dependent child as defined in section 43-1001 of a person who is a member of the armed forces of the United States and who is stationed in this state pursuant to military orders is entitled to classification as an in-state student. A spouse or a dependent child does not lose in-state student classification under this subsection if the spouse or dependent child qualifies for in-state tuition classification at the time the spouse or dependent child is accepted for admission to a community college under the jurisdiction of a community college district governing board or a university under the jurisdiction of the Arizona board of regents. The student, while in continuous attendance toward the degree for which currently enrolled, does not lose in-state student classification.

**F.** A person who is a member of the armed forces of the United States or the spouse or a dependent as defined in section 43-1001 of a member of the armed forces of the United States is entitled to classification as an in-state student if the member of the armed forces has claimed this state as the person's state of legal residence for at least twelve consecutive months before the member of the armed forces, spouse or dependent enrolls in a university under the jurisdiction of the Arizona board of regents or a community college under the jurisdiction of a community college district governing board. For the purposes of this subsection, the requirement that a person be domiciled in this state for one year before enrollment to qualify for in-state student classification does not apply.

**G.** A person who is honorably discharged from the armed forces of the United States shall be granted immediate classification as an in-state student on honorable discharge from the armed forces and, while in continuous attendance toward the degree for which currently enrolled, does not lose in-state student classification if the person has met all of the following requirements:

- 1.** Declared Arizona as the person's legal residence with the person's branch of service at least one year prior to discharge from the armed forces.
- 2.** Demonstrated objective evidence of intent to be a resident of Arizona which, for the purposes of this section, includes at least one of the following:
  - (a)** An Arizona driver license.
  - (b)** Arizona motor vehicle registration.
  - (c)** Employment history in Arizona.
  - (d)** Arizona voter registration.
  - (e)** Transfer of major banking services to Arizona.
  - (f)** Change of permanent address on all pertinent records.
  - (g)** Other materials of whatever kind or source relevant to domicile or residency status.
- 3.** Filed an Arizona income tax return with the department of revenue during the previous tax year.

**H.** A person who is a member of an Indian tribe recognized by the United States department of the interior whose reservation land lies in this state and extends into another state and who is a resident of the reservation is entitled to classification as an in-state student.

**Arizona Law (ARS §15-1804)  
Presumptions relating to student status; definition**

**A.** Unless the contrary appears to the satisfaction of the registering authority of the community college or university at which a student is registering, it shall be presumed that:

1. No emancipated person has established a domicile in this state while attending any educational institution in this state as a full-time student, as such status is defined by subsection B for community college students or as defined by the Arizona board of regents for university students, in the absence of a clear demonstration to the contrary.
2. Once established, a domicile is not lost by mere absence unaccompanied by intention to establish a new domicile.
3. A person who has been domiciled in this state immediately prior to becoming a member of the armed forces of the United States shall not lose in-state status by reason of such person's presence in any other state or country while a member of the armed forces of the United States.

**B.** For the purposes of this section, "full-time student" means a community college student who registers for at least twelve semester hours per semester at a community college in this state.

**Arizona Law (ARS §15-1805.01)  
Admissions; enrollments;  
community colleges**

**A.** Admissions to the community colleges in this state may be granted to any person who meets any one of the following criteria:

1. Is a graduate of a high school that is accredited by a regional accrediting association as defined by the United States Office of Education or approved by a state board of education or other appropriate state educational agency.
2. Has a high school certificate of equivalency.
3. Is at least eighteen years of age and demonstrates evidence of potential success in the community college.
4. Is a transfer student in good standing from another college or university.

**B.** Each community college district shall adopt policies regarding the admission of students under eighteen years of age that include, at a minimum, student completion of course prerequisites and the following requirements:

1. Admission to the community colleges in this state shall be granted to any student who is under eighteen years of age and who achieves one of the following:
  - (a) A composite score of 93 or more on the preliminary Scholastic Aptitude Test.
  - (b) A composite score of 930 or more on the Scholastic Aptitude Test.
  - (c) A composite score of twenty- two or more on the American College Test.
  - (d) A passing score on the relevant portions of the Arizona instrument to measure standards test.
  - (e) The completion of a college placement test designated by the community college district that indicates the student is at the appropriate college level for the course.
  - (f) Is a graduate of a private or public high school or has a high school certificate of equivalency.

2. A community college may limit the number of semester hours in which the

student may enroll to not more than six credit hours.

3. Home schooled students are exempt from this subsection.

**C.** Students who enroll in vocational courses may be admitted on an individual basis with the approval of college officials if the student meets the established requirements of the courses for which the student enrolls and the college officials determine that the student's admission is in the best interest of the student.

**Classification of Students**

**Freshman**

A freshman is a student who has successfully completed 27 or fewer undergraduate semester hours of college credit.

**Sophomore**

A sophomore is a student who has successfully completed 28 or more undergraduate semester hours of college credit.

**Part-Time Student**

A part-time student is a student who is enrolled in fewer than 12 undergraduate hours of college credit during a specific semester/summer term.

**Full-Time Student**

A full-time student is a student who is enrolled in 12 or more undergraduate hours of college credit during a specific semester/summer term.

**Residency Requirements**

Direct any questions regarding residency status to Enrollment Services. Students who are not considered residents will be assessed out-of-state or WUE tuition and fees when registering for classes.

Residency requirements are established by state statute [ARS §15-1801-15-1807] and the Mohave Community College Governing Board.

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An example follows:

Quarter Credit	=	Semester Credit
1	=	0
2	=	1
3	=	2
4	=	2
5	=	3
6	=	4

If a student at a regionally accredited quarter-unit school completed an introductory psychology course at 3 or 4 quarter units, the most s/he might be awarded in transfer would be PSY1TR. The 1TR designation shows credit awarded, but not toward any particular course in that discipline as the student has not met the 3 semester units needed at MCC. A student completing 5 quarter units of introductory psychology at a regionally accredited school may, after review of the course description, be eligible for PSY 101 since the 3 semester unit requirement is met.

### Western Undergraduate Exchange (WUE) Residency Status

Mohave Community College participates in the Western Interstate Commission for Higher Education (WICHE) tuition program: WUE. Students who may request this tuition rate must be: 1) residents of eligible states, or 2) students who have not met Arizona residency requirements and have most recently lived in an eligible state. Eligible states are: Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.

- Some MCC programs are not eligible for the WUE tuition rates. See WUE Tuition rates in the tuition section for details.
- Full-time enrollment under WUE status does not count toward establishing Arizona residency for tuition purposes.

### Transferring Credits from Other Institutions

Students who have attended other colleges/universities must provide MCC with an of-

ficial transcript of all work completed at those institutions.

The Office of the Registrar will evaluate these transcripts to determine what credit will be granted for transfer courses that satisfy MCC degree and certificate requirements. The registrar has final authority in the decision of course transferability.

Credits must have been acquired through a regionally accredited college/university to be eligible for transfer.

Only courses with a grade of "C" or higher will be considered for transfer credit. A "Pass" grade may be accepted, if it is noted on the transcript that "Pass" is equal to a "C" grade.

Courses that fall short of MCC's semester hour equivalents may not be eligible for transfer. The most common reason a course would fall short of MCC's semester hour equivalent would be the case of a course completed on the quarter system. Quarter units are approximately valued at 2/3 the value of semester credits. MCC divides the quarter credits by the standard 2/3 and rounds down to the nearest whole number.

Science, allied health, computer and other technical courses taken 10 or more years ago do not transfer and must be retaken. Fire Science, Emergency Medical Services, Administration of Justice Studies, and Early Childhood Education courses taken 5 or more years ago do not transfer and must be retaken.

If a student's cumulative GPA was below 2.0 at a previous college/university, the student will be admitted to MCC on academic probation. (See the Academic Probation section for details.)

In order to have official transcripts evaluated by the Office of the Registrar, the student must:

1. Complete an MCC admission packet
2. Receive an official MCC ID number
3. Request that the transcripts be evaluated. This request is done through the following Student Services personnel: director, academic and career advisor, academic advisor, or admissions counselor

4. Inform the Student Services personnel of all names under which the transcripts may be listed

A transcript will not be considered official, and will be rejected for evaluation, under any of the following circumstances:

1. The registrar's seal and/or signature is missing
2. The transcript is stamped "Issued to Student" or "Student Copy," etc.
3. The transcript was received directly from the student, either through mail delivery or hand-carried
4. The transcript is for the wrong student
5. The transcript is illegible
6. The transcript contains only the student's name as an identifier. The transcript must contain at least one of the following: minimum of the last four digits of the student's Social Security Number; student's date of birth

To request that a transcript evaluation be reassessed, the student must file a Re-evaluation Petition through a student services director.

Transcripts received by Mohave Community College from other schools become the sole property of MCC. Neither originals nor copies can be released to the student or any third party.

## Foreign Credit

MCC does not evaluate transcripts from colleges/universities outside of the United States. Students wishing to have credits from these institutions transferred to MCC must have their transcripts evaluated by a foreign education credential service. Currently, MCC requires the use of Academic Credentials Evaluation Institute, Inc. (ACEI). Students must request a comprehensive evaluation from ACEI. Information on this evaluation service can be found at [www.acei1.com](http://www.acei1.com). An official, sealed copy of the evaluation must be submitted directly from ACEI to MCC's Office of the Registrar. Final determination of transfer credit will then be made by that office.

## Formal Military Education/ Training Credit

Credit may be awarded to veterans who have completed programs described in "A Guide to the Evaluation of Educational Experience in the Armed Services." This credit can only be determined by evaluation of official military transcripts. Contact the local campus academic and career advisor for more information on obtaining official military transcripts. An official, sealed copy of the transcript must be submitted directly from the appropriate branch of the armed forces to MCC's Office of the Registrar. Final determination of transfer credit will then be made by that office.

## Tech Prep Credit

Mohave Tech Prep connects structured high school programs with MCC. Juniors and seniors can take Tech Prep courses at participating high schools that have a specific course articulation agreement with MCC. Students who pass these courses with a grade of "B" or better are eligible for awarded Tech Prep credit. While Tech Prep credits may be awarded at MCC, these credits may not transfer elsewhere. Participating high schools include: Kingman High School, Lake Havasu High School, Mohave High School, River Valley High School and El Capitan High School.

The Association for Career and Technical Education of Arizona (ACETEaz) is dedicated to the advancement of Career and Technical Education learning that prepares youths and adults for careers in the global competitive workforce. For more information, see an area high school guidance counselor or a local campus student services representative.

## International Students

Mohave Community College is authorized under federal law to enroll non-immigrant, non-citizen students who wish to attend MCC on an F-1 student visa. All required documentation must be received by the appropriate deadlines in order for an F-1 visa student to be considered for admission into MCC.

Acceptance into specific MCC programs does not constitute acceptance into MCC as an F-1 visa student. This designation

comes only from the Office of the Registrar. For more information and a listing of required documentation and deadlines, interested persons must send a written request to:

F-1 Student Visa Information  
Office of the Registrar  
Mohave Community College  
1971 Jagerson Avenue  
Kingman, AZ 86409

## Course Placement Assessment

Mohave Community College wants students to be successful in their courses. The assessment screening is a way for MCC to determine student readiness for college courses, especially those that require minimum skill levels in reading, English composition or mathematics.

For further information concerning course placement, see the MCC Student Handbook.

## Assessment Services

Each campus at Mohave Community College has an assessment center where students can take the COMPASS placement and other assessments as assigned by individual programs.

## Academic Advising

Advising services are delivered by both staff advisors and faculty members, and are available at all campuses to support a student's academic goals. An advisor is assigned to a student upon entry.

The role of academic advisement is to help define and shape academic plans to meet educational goals. Advisors assist students in goal setting, preparing academic progress plans and selecting classes. Advisors have access to resources that will provide students with options as well as direction in various career choices. They will assist in creating a plan to stay on track for graduation, according to students' needs and educational goals.

For more information, contact the Student Services Office at any MCC campus.

## Catalog Choice

In determining certificate or degree gradu-

## Attending MCC

ation requirements, Mohave Community College students may use only one edition of the catalog. Students maintaining ongoing enrollment at MCC or any other state of Arizona community college or state university may graduate from MCC according to the requirements of the catalog in effect at the time of initial enrollment or according to the requirements of any single MCC catalog in effect during subsequent terms of ongoing enrollment. This is dependent upon the availability of the courses and programs being offered at MCC at that time. Once a catalog year has been chosen by the student, any further change of catalog to a year prior to the one chosen cannot be made.

A semester in which a student earns at least three course credits will be counted toward ongoing enrollment. Adult education courses, non-credit courses, audited courses, failed courses or courses from which students withdraw do not count toward the determination of ongoing enrollment for catalog purposes.

Students who do not meet the minimum enrollment standards stipulated above during two consecutive semesters (fall/spring or spring/fall) are no longer considered enrolled in an ongoing status and must meet the requirements of the MCC catalog in effect at the time they are readmitted or of any single catalog in effect during subsequent terms of ongoing enrollment after readmission.

Students admitted or readmitted to MCC during a summer term must follow the requirements of the catalog in effect the previous spring semester or any single catalog in effect during subsequent terms of ongoing enrollment.

Students transferring among Arizona public higher education institutions must meet the admission requirements, residency requirements, and all curricular and academic requirements of the degree-granting institution.

Students who complete a degree program and elect to pursue another degree are subject to the degree requirements of the catalog at the time they select the new degree. Students admitted into an MCC specialized program are subject to the degree

requirements in effect at the time of their program admission, e.g., dental hygiene, nursing, paramedic and truck driver training programs.

Students wishing to earn a certificate or degree at Mohave Community College must have a degree declaration on file. The declaration must be made at a time of initial enrollment at MCC, or re-enrollment if the student is a returning student. The effective date of the declaration is the date the declaration is signed by the student.

Continuing students wishing to change their declared degree or certificate may do so a maximum of once per semester. The change must be made before the end of the semester's official add/drop period for semester-length courses. Any change made after that time will go into effect the following semester or summer term.

### Academic Advising for Transfer Students

Students intending to transfer to another institution should meet with the director of student services or the academic and career advisor to learn about the resources available and to facilitate transfer of MCC credits to the university. Among these resources are transfer guides developed by each university for their majors; the Course Equivalency Guide, which is used to determine transferability of MCC courses; and AzTransfer.com, an online resource for transfer students. Students may also obtain the MCC Transfer Planner online.

### Registering for Classes

MCC defines registration as the process of choosing classes, submitting a completed registration form or registering online, and paying/making payment arrangements for appropriate tuition and fees for the selected classes.

Registration is regarded as a commitment to comply with all regulations of the college. Students may not attend classes until they are officially registered in those classes.

### Registration for New Students to College

All students who are new to college and intend to take credit courses are required

to attend a New Student Orientation before registering for classes. Students who register for 12 or more credit hours or who register for 6 or more credits and test into transitional courses must also include a student success course in the first semester's enrollment. Visit with an academic advisor for more information. If the student success course is not completed successfully it must be taken in the next term of enrollment.

### Registration for Continuing Students

On-campus Registration is available for all admitted students.

Bullhead City Campus  
Student Center, Building 200

Lake Havasu City Campus  
Hero Student Center, Building 200,  
Room 220A

Neal Campus - Kingman  
Anderson Student Services Building 107

North Mohave Campus - Building 100

### Online Registration

Online registration is available for all continuing MCC students and for students who are new to college and have completed new student orientation.

#### STEP 1

Go to [www.mohave.edu](http://www.mohave.edu)

#### STEP 2

Go to [jics.mohave.edu](http://jics.mohave.edu)

#### STEP 3

Log in to EX Web and follow the instructions to add new courses.

#### STEP 4

Payments will be made by credit card.

### Telephone Registration

(Community Outreach Only)

Telephone registration is designed for convenience. Payment for telephone registration is made by credit card only.

## STEP 1

Before calling, refer to the class schedule and have the following information ready:

- Social Security Number and/or MCC Student ID number
- Date of Birth
- Course numbers (Example: LSA 101, LSD 072)
- Credit card number and expiration date (MCC accepts VISA, MasterCard, Discover and American Express).

## STEP 2

Contact the Office of Enrollment Services to register for classes:

MCC Toll-free	866.664.2832
Bullhead City Campus	928.758.1139
Lake Havasu City Campus	928.453.1139
Neal Campus - Kingman	928.757.0839
North Mohave Campus	928.875.2799
NMC Toll-free	800.678.3992

Registration is complete when all tuition and fee payment arrangements have been made.

## Add/Drop

A student may add a course to his/her schedule previous to and during that course's official add/drop period.

A student may drop a course before and during that course's official add/drop period and receive a refund, if applicable. (See section on Refunds for more information.) See the academic calendar for add/drop dates.

## Withdrawal (W)

It is the student's responsibility to withdraw from a course. Ceasing to attend the course does not constitute a withdrawal. A student who stops attending class and does not follow the official withdrawal procedure will receive the grade earned for all assignments and exams given during the entire course. This grade could be a "U" or an "F". A student who follows the procedure will receive a "W" grade for the course. No earned credits for the withdrawn course will be awarded; however, attempted credits for the withdrawn course will be recorded on the student's transcript.

Withdrawals are non-refundable. See the academic calendar for the specific withdrawal dates for this academic year. For the official withdrawal procedure, go to [www.mohave.edu/pages/434.asp](http://www.mohave.edu/pages/434.asp) and click on "Withdrawing from a Class".

## Administrative Withdrawal (WR Grade)

The college reserves the right to withdraw students from classes at any time during the semester. An instructor must issue an administrative withdrawal (WR1 Grade) due to nonattendance (on-ground and ITV classes). The registrar's office facilitates the administrative withdrawal (WR1 Grade) for non-participation (online classes). A student may appeal a WR1 grade by following the grade appeal procedure described in the student handbook. Appeals made for courses that cross the 45th calendar day of the semester must be completed before that date. A student may also be administratively withdrawn for these reasons:

- WR2 Non-payment of tuition and fees
- WR3 Disruptive behavior
- WR4 Deceased

## Repeating Classes

Specific MCC academic programs and financial aid limit the number of times a course may be repeated. Where the requirements of those programs are more stringent, they supersede this procedure. Exceptions to the following course repeat limits require the written approval of the dean of instruction.

A student may repeat the following courses up to two times after the initial attempt:

- Courses where the most current grade is a B, C, D or F.
- Courses in music and theatre performance.

*Students may repeat as necessary:*

- Precollege Studies courses, in order to raise the skill level for success in college-level work, as authorized by an advisor.
- Courses to acquire certification (e.g., First Aid). Note: This is not to be confused with earning an MCC Certificate of Proficiency.

- Courses to update knowledge and/or skills due to periodic content changes (e.g., Tax Preparation).
- Any course in which a "W" is received.

Only the higher of the repeated course grade(s) will be used in computing the grade point average. All grades will be posted on the permanent record and transcript. Credit courses at MCC will only be counted once toward fulfilling the credit requirements for any degree or certificate.

## Auditing Classes (AU Grade)

A course may be repeated beyond the stated limits of the Repeat Policy as an Audit.

Tuition for auditing courses is set at \$10 per credit hour, on a space-available basis, only after the class has enough for credit students enrolled to be offered. Students will only be allowed to enroll in a course as audit during the drop/add period of each term. No audits are allowed for medical programs or special courses, unless the student is accepted into the program as a formal student.

No course fees will be applied to audit enrollment and no lab participation will be provided as part of the audit. The Student Activity Fee and Technology Fee will be applied and prerequisites must be met.

An audit designation must be specified by the student during course enrollment. The AU designation will be assigned at that time. No credit will be given for audited courses; they do not count as part of the term's credit load or as credit toward graduation. Students will not receive financial aid or Veterans Education Benefits for audited courses. Audited courses will appear on the official MCC transcript as an AU grade.

## Independent Study

The determination to offer a student an Independent Study shall be based upon a substantial rationale. The guidelines are listed below:

- Student has a minimum GPA of 2.5
- The student has declared a degree or certificate, and must have the course in the current semester in order to meet graduation requirements



- The course requested for independent study is not offered during the semester or summer session in other modalities (student's home campus, ITV, online)
- The course is needed to continue in a progression of sequential courses (Example: A 200-level course requirement but class enrollment does not meet requirement for regular course offering.)

If a student wishes to take a class by Independent Study, s/he must meet with the campus director of student services to see if the student meets the Independent Study application requirements. An academic chair must approve the application before a student may register for the class.

### Dual Enrollment Opportunities

Area high schools and Mohave Community College may offer college courses during the school day that can be counted toward both high school and college graduation requirements.

*"All students enrolled for college credit shall be high school juniors or seniors. All students in the course, including those not electing to enroll for college credit, shall satisfy the prerequisites for the course as published in the college catalog and shall comply with college policies regarding student placement in courses." [ARSS 15-1821.01]*

For more information, see an area high school guidance counselor or a local

campus student services representative.

## Tuition, Fees and Payment

Tuition is applied to all credit courses and is charged per credit hour.

All tuition and fees are to be paid at the time of registration. Some programs, courses and activities at MCC have additional fees associated with them. Please see complete list of fees.

### In-State Tuition Rates

In-state student tuition will be **\$74** per credit hour during the 2011- 12 academic year.

*Example:* A one-credit course will cost \$74. A three-credit course will cost \$222.

### Out-of-State Tuition Rates

Out-of-state students will be **\$296** per credit hour during the 2011- 12 academic year. Technology, course and laboratory fees are the same as for in-state students.

*Example:* A one-credit course will cost \$296. A three-credit course will cost \$888.

### Western Undergraduate Exchange (WUE) Tuition Rates

Students qualifying for the WUE tuition rates will pay **\$111** of the in-state tuition rate. Technology, course and laboratory

fees are the same as for in-state students. *Example:* A three-credit course will cost \$333 (3 x \$111)

MCC excludes Allied Health courses with the following prefixes from the WUE rate: CHD, DEH, EMS, NUR, PTA, SGT. The tuition rate for these courses is **\$296** per credit hour.

### Senior Citizen Tuition Rate

The Senior Citizen Rate applies to students who meet Arizona state residency requirements and are at least 62 years of age at the time of registration.

Tuition for credit courses is set at 75% of the regular tuition as set by the Governing Board. All fees for credit courses (technology fees, lab fees, etc.) are set at 100% as listed here.

Tuition for Community Outreach course work is 75% of the standard approved course rate. Any studio or lab fees for these courses are set at 100%.

### English Language Acquisition (ELA) & GED

Please call the campus Precollege Studies Office for current tuition rates for Adult Basic Education (ABE), English Language Acquisition for Adults (ELA) and General Educational Development (GED) Programs.

### Methods of Payment

MCC will accept personal checks, MasterCard, VISA, Discover, American Express, money orders and cash. The following options are available to:

- Pay the full tuition and fee payment at the time of registration.
- Pay the full tuition and fee payment by the fee payment deadline.\*
- Receive a Financial Aid Award notification by the fee payment deadline.\*
- Enroll in payment plan (see directions below).

Mohave Community College has contracted with Nelnet Business Solutions to provide various payment options to assist students in paying for college. MCC is



pleased to offer e-Cashier as a convenient online payment plan. The payment plan on e-Cashier allows students to select installment plans that are spread over several months, depending on when registration occurs. Payments can be made online from a checking or savings account or credit card. The only cost to participate in the e-Cashier program is a \$25.00 per semester nonrefundable fee. There is no fee when payment is made in full. The payment is processed immediately. This is not a loan program, there is no debt incurred and no credit search. There are no interest or finance charges assessed by NBS on the unpaid balance.

To register for classes and take advantage of the payment plan option go to <https://jics.mohave.edu>. Select classes and then click on "My Account Balances." Students can then select "Payment Plan Setup" and will be directed to the e-Cashier page that provides information on how to sign up for the plan, and how to select a payment schedule and make payments. There are also answers to some frequently asked questions. If already registered, sign-in and go to EX Web. Click on "Account Information" and on the next page appears the e-Cashier icon in red. Click on the icon for the information mentioned above.

### AR HOLDS

Any students owing money to the college will be placed on an Accounts Receivable hold (AR Hold). An AR hold blocks a student from accessing his/her account on the Web. The student will also not be able to receive grades, transcripts, certificates, diplomas, etc. An AR hold blocks a student from withdrawing from classes; it also blocks a student from adding or dropping classes in the current semester and enrolling in classes in future semesters. In order to remove the AR hold, a student's account must be paid in full. For more information, contact the MCC bursar's office.

## Program, Testing, Administrative & Course Fees

Technology Fee *	\$.6/cr. hour
Student Activity Fee*	\$.2/cr. hour

### Program Fees

Dental Hygiene (DEH) Program (Fall & Spring)	\$2,750**
Nursing (RN) Program Fee	\$1,300
Paramedic to RN Program Fee (Fall, Spring, Summer)	\$1,300
Physical Therapist Assistant (PTA) (Fall & Spring)	\$1,850
Fire Science Academy Fee (FSC)	\$2,990***
Truck Driver Training (TDT)	\$4,300****

### Administrative Fees

Auditing a Course.	\$10/cr. hour
Field Trip Transportation Fee	Determined per Trip
Field Trip Entrance/Attendance	Student's responsibility
Returned Checks (each)	\$35
Higher One Replacement Card	\$20
Official Transcript (each)	\$5

### Nelnet Fees

Payment Plan	\$25
Returned Checks	\$30

### Testing Fees

	Student Fee	Non-Student Fee
Biology Competency Exam	\$25	\$25
CLEP Administration Fee (3+ credits)	\$30	\$55
CLEP Collected at time of test	\$77	\$77
Compass Test and Retest	NO CHARGE	
Test of Essential Academic Skills (TEAS) (Nurse's Entrance Test)	\$40	\$50
Challenge Test Credit by Examination	Tuition	
EMS 122, 220, 222, 225, Practical Exams	\$50	
EMS Recertification Challenge Practical Exam	\$100	
EMS Recertification Challenge Written Exam	\$40	
<b>EMS 244</b>		
Practical Examination	\$150	
National Registry Advanced Practical	\$150	
EMS National Registry Adv. Practical Retest	\$45	\$100
Exams from Other Schools	\$25	\$50
Fire Fighter Entrance Exam	\$50	\$50
Fire Fighter Certification Exam	\$50	\$50
HOBET (Health Occupations Basic Entrance Test)	\$40	\$50
Work Keys Test	\$10	\$10

**Note:** For information concerning General Education Development (GED®) testing, contact your campus Precollege Studies Office for fee and scheduling information.

\* Technology and Student Activity Fee does not apply to the Truck Driver Training and Precollege Studies (PCS) courses.  
 \*\* First semester Dental Hygiene fee includes a non-refundable \$500 deposit paid at time of application.  
 \*\*\* Includes the Technology Fee and Student Activity Fee.  
 \*\*\*\* Program Fee includes tuition and books. (Other charges may apply and will be assessed directly by SAGE Corp.)

## Course Fees

### Automotive Collision Repair Technology

ACT111	Metal Welding and Cutting . . . . .	\$165.00
ACT121	Non-Structural Repair Preparation . . . . .	\$165.00
ACT123	Metal Finishing and Body Filling . . . . .	\$165.00
ACT141	Refinish Safety . . . . .	\$55.00
ACT142	Surface Preparation I . . . . .	\$110.00
ACT143	Spray Equipment Operation . . . . .	\$110.00
ACT150	Panel Repair and Replacements . . . . .	\$165.00
ACT151	Structural Damage Diagnosis . . . . .	\$165.00
ACT152	Structural Damage Repair . . . . .	\$165.00
ACT153	Refinishing . . . . .	\$235.00
ACT160	Fixed Glass, Plastics and Adhesives . . . . .	\$275.00
ACT205	Estimating and Shop Management . . . . .	\$165.00
ACT211	MIG Welding and Cutting II . . . . .	\$110.00
ACT231	Adv. Structural Damage Diagnosis & Repair . . . . .	\$165.00
ACT237	Automotive Collision Technology Lab . . . . .	\$165.00
ACT241	Paint Defects - Causes and Cures . . . . .	\$165.00
ACT242	Surface Preparation II . . . . .	\$110.00
ACT243	Refinishing II . . . . .	\$235.00
ACT244	Final Detail . . . . .	\$110.00

### Art

ART111	Design I . . . . .	\$15.00
ART112	Design II . . . . .	\$15.00
ART113	The Science Of Color . . . . .	\$15.00
ART121	Drawing I . . . . .	\$15.00
ART125	Painting I . . . . .	\$15.00
ART126	Painting II . . . . .	\$15.00
ART128	Watercolor I . . . . .	\$15.00
ART129	Watercolor II . . . . .	\$15.00
ART151	Basic Black & White Photography . . . . .	\$30.00
ART152	Basic Photography . . . . .	\$30.00
ART171	Ceramics I . . . . .	\$60.00
ART172	Ceramics II . . . . .	\$60.00
ART175	Sculpture I . . . . .	\$45.00
ART176	Sculpture II . . . . .	\$45.00
ART221	Drawing II . . . . .	\$15.00
ART223	Figure Drawing I . . . . .	\$60.00
ART251	Intermediate Photography . . . . .	\$30.00
ART256	Digital Photography I . . . . .	\$30.00

### Automotive Service Technology

ASE111	Electrical/Electronic Systems I . . . . .	\$82.00
ASE112	Electrical/Electronic Systems II . . . . .	\$123.00
ASE113	Electrical/Electronic Systems III . . . . .	\$82.00
ASE132	Automotive HVAC Systems . . . . .	\$123.00
ASE141	Automotive Engines I . . . . .	\$123.00
ASE142	Automotive Engines II . . . . .	\$164.00
ASE151	Automotive Ignition Systems . . . . .	\$82.00
ASE152	Intake and Exhaust Systems . . . . .	\$82.00
ASE153	Fuel Delivery Systems I . . . . .	\$82.00
ASE154	Fuel Delivery Systems II . . . . .	\$82.00
ASE255	Emission Control Systems . . . . .	\$41.00
ASE256	On-Board Diagnostic Systems I . . . . .	\$82.00
ASE257	On-Board Diagnostic Systems II . . . . .	\$82.00
ASE260	Manual Transmission Systems . . . . .	\$82.00
ASE271	Automatic Transmission Systems I . . . . .	\$123.00

ASE272	Automatic Transmission Systems II . . . . .	\$82.00
ASE281	Brake Systems I . . . . .	\$125.00
ASE282	Brake Systems II . . . . .	\$125.00
ASE291	Suspension and Steering I . . . . .	\$125.00
ASE292	Suspension and Steering II . . . . .	\$125.00

### Astronomy

AST101	Introductory Astronomy . . . . .	\$30.00
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### Biology

BIO100	Biology Concepts . . . . .	\$40.00
BIO160	Human Structure and Function . . . . .	\$40.00
BIO181	General Biology (Majors) I . . . . .	\$40.00
BIO182	General Biology (Majors) II . . . . .	\$40.00
BIO201	Anatomy and Physiology I . . . . .	\$40.00
BIO202	Anatomy and Physiology II . . . . .	\$40.00
BIO205	Microbiology . . . . .	\$50.00
BIO290	Field Biology I . . . . .	Varies
BIO291	Field Biology II . . . . .	Varies

### Chemistry

CHM130	Fundamental Chemistry . . . . .	\$40.00
CHM140	Fundamental Organic and Biochemistry . . . . .	\$50.00
CHM151	General Chemistry I . . . . .	\$40.00
CHM152	General Chemistry II . . . . .	\$40.00
CHM235	General Organic Chemistry I . . . . .	\$50.00
CHM236	General Organic Chemistry II . . . . .	\$50.00

### Culinary Arts

CUL111	Introduction to Culinary . . . . .	\$705.00
CUL112	Techniques of Healthy Cooking . . . . .	\$340.00
CUL113	Saucier . . . . .	\$340.00
CUL114	Baking . . . . .	\$340.00
CUL115	Sanitation and Safety . . . . .	\$40.00
CUL116	Supervisory Management . . . . .	\$40.00
CUL117	Purchasing and Receiving . . . . .	\$40.00
CUL118	Hospitality and Culinary Marketing . . . . .	\$40.00
CUL211	Food and Beverage Cost Control . . . . .	\$40.00
CUL212	American Regional Cuisine . . . . .	\$340.00
CUL213	International Cuisine . . . . .	\$340.00
CUL214	Hospitality and Culinary Law . . . . .	\$40.00
CUL215	Artisan Breads . . . . .	\$340.00
CUL216	Advanced Baking and Pastry . . . . .	\$340.00
CUL217	Chocolate, Confections, Sugar Work & Restaurant Desserts . . . . .	\$340.00

### Dental Assisting

DAE105	Dental Infection Control . . . . .	\$50.00
DAE106	Dental Assisting Radiography (includes certification exam fees) . . . . .	\$390.00
DAE107	Dental Assisting I . . . . .	\$150.00
DAE108	Dental Assisting II . . . . .	\$150.00
DAE109	Dental Assisting Materials . . . . .	\$175.00
DAE120	Dental Specialties . . . . .	\$200.00

### Electrical

ELC110	Electrical Wiring . . . . .	\$40.00
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ELC111	Residential Wiring . . . . .	\$40.00
ELC200	Grounding & Bonding . . . . .	\$20.00
ELC205	Relay Control Systems . . . . .	\$40.00
ELC210	Commercial/Industrial Electricity I . . . . .	\$40.00
ELC211	Commercial/Industrial Electricity II . . . . .	\$40.00
ELC220	Electrical Motors and Controls . . . . .	\$40.00
ELC221	Low Voltage Systems . . . . .	\$40.00

**Emergency Medical Services**

EMS120	First Aid . . . . .	\$20.00
EMS122	First Responder. . . . .	\$40.00
EMS200	EMS Instructional Strategies . . . . .	\$45.00
EMS220	First Responder Refresher . . . . .	\$10.00
EMS222	Basic EMT . . . . .	\$120.00
EMS225	Refresher EMT . . . . .	\$20.00
EMS240	Paramedic I . . . . .	\$240.00
EMS241	Paramedic II . . . . .	\$240.00
EMS242	Paramedic III . . . . .	\$240.00
EMS243	Paramedic IV . . . . .	\$240.00
EMS244	Paramedic V . . . . .	\$240.00
EMS248	Paramedic Refresher . . . . .	\$75.00
EMS250	Trauma Life Support . . . . .	\$80.00
EMS251	Pediatric Education for Pre-hospital Professionals (Basic Life Support). . . . .	\$20.00

**Environmental Science**

ENV101	Environmental Science . . . . .	\$40.00
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**Fire Science**

FSC 110	Fire Fighter Academy. . . . .	\$2,990.00
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**Geography**

GHY212	Introduction to Meteorology . . . . .	\$40.00
GHY213	Climate Studies. . . . .	\$40.00

**Geology**

GLG101	Physical Geology . . . . .	\$40.00
GLG102	Historical Geology . . . . .	\$40.00
GLG110	Environmental Geology/Natural Disaster . . . . .	\$40.00
GLG140	Oceanography . . . . .	\$40.00

**Heating, Ventilation and Air Conditioning**

HVA105	Fundamentals of Refrigeration . . . . .	\$60.00
HVA120	Residential HVAC Installation . . . . .	\$60.00
HVA130	Residential HVAC . . . . .	\$60.00
HVA140	Residential Heating . . . . .	\$60.00
HVA150	HVAC Electrical Troubleshooting. . . . .	\$60.00
HVA220	Commercial and Domestic Refrigeration. . . . .	\$60.00

**Medical Assisting**

MEA101	Basic Phlebotomy Techniques . . . . .	\$45.00
MEA102	Phlebotomy Practicum . . . . .	\$45.00
MEA115	Basic Electrocardiograph Techniques. . . . .	\$30.00
MEA150	Clinical I. . . . .	\$40.00
MEA230	Clinical II. . . . .	\$40.00
MEA249	Laboratory Techniques . . . . .	\$50.00

**Nursing**

NUR115	Nursing Assistant. . . . .	\$150.00
NUR117	Medication Assistant course. . . . .	\$100.00
NUR123	Transition to Practical Nursing . . . . .	\$50.00
NUR135	L.P.N. Refresher . . . . .	\$100.00
NUR137	Articulation to Healing Community . . . . .	\$100.00
NUR235	Registered Nurse Refresher. . . . .	\$100.00

**Pharmacy Technology**

PHT171	Pharmaceutical Calculations . . . . .	\$50.00
PHT174	Pharmacy Operations . . . . .	\$66.00
PHT180	Sterile Products. . . . .	\$71.00

**Physics**

PHY107	Conceptual Physics . . . . .	\$40.00
PHY111	General Physics I. . . . .	\$40.00
PHY112	General Physics II . . . . .	\$40.00
PHY115	University Physics I. . . . .	\$50.00
PHY116	University Physics II . . . . .	\$50.00

**Plumbing**

PLU101	Introduction to Plumbing. . . . .	\$45.00
PLU102	Intermediate Plumbing Techniques . . . . .	\$45.00

**Surgical Technology**

SGT121	Orientation and Introduction to Surgery . . . . .	\$360.00
SGT122	Surgical Techniques . . . . .	\$720.00
SGT123	Pharmacology for Surgical Technology . . . . .	\$180.00
SGT125	Microbiology for the Surgical Technologist. . . . .	\$360.00
SGT221	Surgical Concepts . . . . .	\$360.00
SGT222	Surgical Procedures . . . . .	\$720.00
SGT223	Introduction to the Operating Room . . . . .	\$360.00
SGT224	Surgical Complications. . . . .	\$720.00
SGT225	Surgical Technology Externship I. . . . .	\$1,620.00
SGT226	Surgical Technology Externship II. . . . .	\$1,980.00

**Truck Driver Training**

TDT150	Specialized Training . . . . .	\$300.00
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**Welding**

WLD101	Introduction To Welding . . . . .	\$108.00
WLD102	Cutting Process and Welding Quality. . . . .	\$108.00
WLD105	Weld Fit Up/Inspection/Metallurgy. . . . .	\$93.00
WLD125A	Shielded Metal Arc Welding . . . . .	\$170.00
WLD125B	Shielded Metal Arc Welding . . . . .	\$170.00
WLD126	Gas Tungsten Arc Welding I. . . . .	\$108.00
WLD129	Gas Metal Arc Welding. . . . .	\$170.00
WLD201	Flux Cored Arc Welding . . . . .	\$170.00
WLD226	Gas Tungsten Arc Welding II . . . . .	\$108.00
WLD228A	GTAW Pipe I . . . . .	\$108.00
WLD228B	GTAW Pipe II . . . . .	\$108.00
WLD229	Gas Metal Arc Welding Pipe . . . . .	\$108.00

### Refunds

#### Tuition and Fee Refund Policy for Credit Courses

If a student drops a class during that class's official add/drop period, the student may receive a refund of 100% of tuition and applicable fees paid to the college. This does not include any fees designated as "non-refundable."

All refunds will be issued to students via the Bighorn One Card. When the card is received and activated, students can choose how college refunds are received. Refunds are processed within two (2) weeks after the official add/drop period.

**NOTE:** Dropping a class can affect your financial aid. Be sure to contact the financial aid office before dropping any classes.

#### The Drop Process

All drops should be completed using the college's online EX Web system at <https://jics.mohave.edu>. Once in EX Web, click on the Student tab and choose add/drop courses. Follow the directions as listed. For technical assistance contact the MCC Helpdesk.

#### Special Circumstances

Approval for special circumstance refunds must be obtained from the dean of student services.

In special circumstances, after the official add/drop period, a student may drop courses for one of the following reasons and receive a refund of tuition and fees, except fees for instrument, tool or uniform costs:

1. Serious illness of the student (100 percent refund of tuition and net fees) as long as the request is made prior to the end of the semester in which the illness occurs. The student must submit a verifiable doctor's statement certifying that the illness prevents him/her from attending classes.
2. The death of the student taking the course or the death of the parent, child or

spouse (100 percent refund of tuition and net fees) if the request is made prior to the end of the semester in which the death occurs. The student or the student's survivor must provide a death certificate or newspaper obituary notice as well as proof of relationship (birth certificate, marriage license).

3. Military service (100 percent refund of tuition and net fees), if the student belongs to the armed forces or National Guard and is called to active duty and assigned to a duty station distant from the campus. A copy of the military orders must be provided.

4. When courses are dropped all financial aid received must be repaid by the student.

#### Truck Driver Training Program

Refunds for MCC's Truck Driver Training program are offered in conjunction with SAGE Corporation. SAGE applies the following refund policy to students who have paid required school charges (tuition, fees, etc.): A full refund will be provided to any student who cancels prior to starting class, or who terminates from the program for any reason up to the third day of classes. After the third day of classes, no refund shall be given. In the event of any refund, SAGE shall retain a processing fee of \$100.

### Financial Aid

The mission of the financial aid office is to provide MCC students, prospective, current and past, with prompt, accurate and courteous financial aid assistance.

To help students meet the financial obligations of college attendance, Mohave Community College administers a varied and comprehensive financial aid program. Financial aid is designed to bridge the gap between the costs of attending college and what students and their families are expected to contribute. Citizens, or eligible non-citizens of the United States, may apply for assistance regardless of sex, age, color, religion, marital status, national origin, pregnancy-related conditions, handicap, or veteran disability.

The U.S. Department of Education, through MCC, offers four major student financial aid programs:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG.)
- Federal Work Study (FWS).
- Federal Direct Student Loans (FDSL) which includes subsidized (SDSL) and unsubsidized (UDSL).

A complete description of these programs is available online at: [www.studentaid.ed.gov](http://www.studentaid.ed.gov).

For complete information on financial aid including: How to apply, scholarships available and veteran's benefits, etc., refer to the Student Handbook. In addition, information on MCC financial aid programs is available at: <http://www.mohave.edu/financialaid>.

#### Non-college Scholarships

Community groups and other organizations have generously provided scholarships to Mohave Community College students. Interested students should personally contact these organizations for applications. Appropriate addresses are usually listed in local telephone directories or may be acquired through each local chamber of commerce. A list of these organizations can be found in the Student Handbook at [www.mohave.edu](http://www.mohave.edu).

#### Veterans Education Benefits

Mohave Community College provides services to veterans, widows and dependents who may be eligible for educational assistance from the U.S. Department of Veterans Affairs. Services offered include assistance with the application for education benefits, tutorial assistance and services for disabled veterans. Veteran students may be eligible to defer their payment of tuition, fees and books.

Veterans must meet satisfactory academic progress to continue using their VA Education Benefits at MCC. Students using VA Education Benefits who are found to have met the requirements for Academic

Dismissal as listed in this catalog will have their benefits discontinued and be reported as terminated to the U. S. Department of Veterans Affairs. Students meeting the requirements for re-entrance will be allowed to reinstate the use of their VA Education Benefits, although the U. S. Department of Veterans Affairs will make the final decision as to whether they will continue to pay out for those education benefits.

It is important to note that the VA will only pay for classes that are required for the degree or certificate the student is pursuing. Courses taken outside of the declared program of pursuit will not be certified for benefits. Please call or visit an academic and career advisor at the nearest MCC campus to obtain the necessary paperwork to start or continue a claim for education benefits. Additional information on VA Education Benefits may be obtained at: [www.mohave.edu](http://www.mohave.edu) or the VA Education Benefits Web site at [www.gibill.va.gov](http://www.gibill.va.gov)

MCC is a proud participant with Servicemembers Opportunity Colleges (SOC).

## Early Start Scholarship

High school students, GED graduates and home school students are eligible for the Early Start Scholarship.

This scholarship is available for a maximum of seven credit hours for three semesters after the student's junior year. The semesters include the summer semester after the junior year and the fall and spring semester during a student's senior year.

This scholarship is available for GED graduates for one year from the date the GED certificate is issued. Out-of-state and WUE students will be awarded at in-state tuition rates and must pay the difference to utilize the scholarship.

An Early Start Scholarship application must be completed and processed by a campus admissions counselor or student services representative.

The Early Start Scholarship is for tuition only. All fees must be paid by the student at the time of registration.

The college reserves the right to limit the scholarship at any time if budgetary restrictions should occur.

## Academic Services

### Bookstore

Each campus has a bookstore which sells the books and supplies required for MCC classes. The bookstore also sells arts and crafts supplies, clothing with the MCC logo, magazines, calculators, gift items and more.

### MCC Course Challenge Examination

A Challenge Examination is a test that may be taken after enrolling in selected courses offered by the college. By taking a Challenge Exam, students are attempting to officially "test out" of a course. There is no additional fee for a Challenge Exam beyond the regular course tuition and fees.

Students must request to take the exam within the scheduled add/drop period. Not all courses can be challenged. Students should meet with the appropriate academic chair or program director to see if a course has a challenge exam and what its requirements are.

If a "C" or higher is earned on the exam, the student will have successfully completed the course and will not be allowed to attend any further class sessions. The grade received on the challenge exam will appear on the official transcript and will count in the GPA computation.

If the grade earned is less than a "C," the student has the choice of accepting the exam grade or continuing to attend the class to try to improve the grade. Students will not be allowed to drop or receive a refund for any courses that are challenged.

### Advanced Standing (non-traditional) credit

The CLEP, formal military education and high school advanced placement tests are contained in the category of Advanced Standing credit. A student may earn a maximum of one-third of the credits required

for a degree or certificate of proficiency by using Advanced Standing credits.

### College-Level Examination Program (CLEP)

Contact a local MCC campus testing center for information about CLEP, including tests available and accepted at MCC, test scores and credits accepted by MCC, application forms, test registration, costs, score reporting policies and restrictions.

### High School Advanced Placement (AP) Test

AP test scores should be sent directly from The College Board™ to the MCC registrar's office. The Advanced Placement test score standards are decided by each discipline's state-wide Articulation Task Force (ATF) and approved by the Arizona Academic Program Articulation Steering Committee (APASC). For a current listing of approved subject areas, please contact your local campus director of student services or visit the following Web site: [www.AZTransfer.com/othertools](http://www.AZTransfer.com/othertools).

### Precollege Studies

Precollege Studies include English Language Acquisition for Adults (ELA), Adult Basic Education (ABE), and General Education Development (GED) programs. These programs are for students whose native language is not English (ELA), who need more intensive academic preparation for college (ABE) and/or need to complete his/her high school diploma (GED).

ABE and GED classes are offered at each campus during both day and evening hours. The structure of classes is designed to meet a variety of student learning styles with focus on providing a quality academic foundation.

ELA classes are only offered at the Bullhead City Campus.

### Enrolling in Precollege Studies

Enrollment into Precollege Studies classes is based on scores received on the assessment placement screening. If the student's scores indicate the need for academic development, the student will receive a report which identifies these specific skills.

## Attending MCC



### To enroll a student must:

- Attend an orientation class
- Be at least 16 years old
- Not be currently enrolled in another secondary school program
- Provide proof of legal residency

On-campus orientation classes are held several times a semester.

## Precollege Studies Assessments

### Test of Adult Basic Education Complete Language Assessment System - English (TABE CLAS E)

The TABE CLAS E is the state mandated test for speakers of other languages and is a requirement for those who are taking an English Language Acquisition for Adults (ELA) ABE grant-funded course. These courses lead to improved skills in listening, speaking, reading and language arts. A pre-test is given during orientation and an appropriate course level is assigned. Students are required to complete a post-test at each level to determine educational gains. If a student is returning after an absence of more than two semesters, the orientation and TABE CLAS E must be retaken.

### Test of Adult Basic Education (TABE)

The TABE is a state mandated requirement for taking a non-ELA ABE grant-funded course (including GED classes). The courses in this program lead to improved skills in reading, language arts and math.

The TABE pre-test is taken during the orientation course and appropriate course levels are assigned. Students are required to complete a post-test at each level to determine educational gains. If a student is returning after an absence of two semesters or more the orientation course and the TABE test must be retaken.

For further information on any aspect of obtaining your GED, contact Precollege Studies at one of the following locations:

Bullhead City Campus	928.704.7786
Lake Havasu City Campus	928.505.3332
Neal Campus - Kingman	928.692.3040
North Mohave Campus	928.875.9120
E-mail	mccged@mohave.edu

### English Language Acquisition for Adults Program (ELA)

These classes are designed for students whose native language is not English.

### To enroll a student must:

- Be at least 16 years old
- Not be currently enrolled in another secondary school program
- Provide proof of legal residency

### The ELA process is:

- Attend and complete: ELA 029 and an ELA Orientation for diagnostic screening and placement.
- Depending on placement, students are enrolled in beginning, intermediate or advanced classes.
- In each course students will be post-tested to determine if they are prepared to move to the next level.

The objective is to improve the student's verbal, written and reading English language skills. For more information on ELA educational opportunities, please contact-  
Precollege Studies at: 928.704.7796  
Spanish 1.866.664.2832, Ext.1733

### Transitional Studies

Transitional studies include transitional English and transitional math. These courses are for students who need to refresh their skills in English and/or math before taking on the rigor of college freshman classes.

### To enroll, a student must:

- Visit a campus office of student services
- Take the assessment placement screening
- Take the diagnostic screening

### Library Services

An MCC library is located on each campus and supports the academic programs of Mohave Community College. Each campus library is available for students, faculty, staff and community members.

The library Web site, [www.mohave.edu/library](http://www.mohave.edu/library), offers online access from any campus or home to resources such as articles and e-books, as well as a variety of subject specific databases. Each library also provides services including one-on-one

research assistance, best-seller collections and access to materials from over 60,000 libraries around the world, available through Inter-Library Loan (ILL).

In addition, the library houses a large collection of books, DVDs, newspapers, magazines, periodicals, computers, printers, photocopiers, laptops with wireless Internet access, ANGEL access, group and individual quiet study areas, plus much more.

The library staff is always available to offer research assistance and scheduled research instruction sessions for classes. Contact the campus library for more information.

Send a question through e-mail or chat by clicking on the "Ask a librarian" logo found on the library home page. The MCC library has a collection of many resources including available services:

- Thousands of circulating book materials
- Student access computers at each campus library
- Full-text articles from thousands of periodical titles via online databases
- Print journals, newspapers and magazines
- Growing collection of DVDs, talking books, etc.
- Research Instruction Sessions by appointment
- Wireless Internet access at each campus library
- ANGEL access
- Use of Inter-Library Loan to borrow materials from other colleges/universities
- Access to research information from home through the library Web page: [www.mohave.edu/library](http://www.mohave.edu/library) using your library card/student ID
- Send a question or a request through the "Ask a librarian" online form found on the library home page.

## Student Records

All inquiries regarding a student's official records should be made through the Office of the Registrar.

### Student Records Confidentiality

ANNUAL NOTIFICATION: Students will be

notified of their FERPA (Family Educational Rights and Privacy Act) rights by publication in the college catalog.

## FERPA Information

The Family Educational Rights and Privacy Act of 1974 (FERPA) affords a student certain rights with respect to his/her education records. A student has the right to:

**1.** Inspect and review the student's own education records within 45 days of the day the college receives a request for access.

A student should submit, to the registrar, a written request that identifies the record(s) the student wishes to inspect. The registrar will make arrangements for access and notify the student of the time and place where the record(s) may be inspected.

**2.** Request an amendment of the education record that the student believes is inaccurate or misleading. A student may ask the college to amend a record that is believed to be inaccurate or misleading. The written request should be addressed to the registrar, clearly identify the part of the record that is to be changed, and specify why it is inaccurate or misleading.

If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

**3.** Consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support

staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

According to FERPA, its amendments and the final rule of the U.S. Department of Education, the only information which may be released without the student's written consent is directory information. Directory information includes name, address, phone number, date and place of birth, major field of study, and participation in athletic programs, weight and height of athletic team members, most recent previous school attended, dates of attendance, degrees awarded, photographs, e-mail address and enrollment status.

Students currently enrolled may withhold disclosures of "Directory Information" under the Family Educational Rights and Privacy Act of 1974, as amended. Written notification must be received in the Office of the Registrar prior to the first day of class each semester. Failure on the part of any student to specifically request that "Directory Information" be withheld indicates individual approval for disclosure.

## Transcripts

Students requesting MCC transcripts must complete a Transcript Request Form. The form is available at any MCC campus. It is also available by going to [www.mohave.edu](http://www.mohave.edu). Click on Student Resources then click on Forms Online. Print the form, fill it out and mail/FAX it to the address/FAX number on the form.

**Sign the form.** Student signatures are required in order to release information to the student or any third party. Currently, there is no fee charged for requested transcripts.

As noted on the form, allow 10 to 15 business days from the receipt of the form in the registrar's office for the request to be processed.

Students are strongly encouraged to check their MCC online transcript every semester. Any discrepancies that may be on the transcript must be brought to the attention of the registrar's office within one calendar year of the completion of the course(s) in question. Transcript investigation requests that do not meet the appropriate timeline will not be accepted.

For grade grievances, see the Student Problem Resolution Process for grade review in the Student Handbook.

### Distance Education

Distance Education (DE) at Mohave Community College offers a flexible alternative to traditional classroom instruction with the same quality and standards as regular on-campus courses. Courses are offered via the Internet (online courses) and via Interactive Television (ITV).

#### Programs and Courses

Distance Education at MCC provides a wide variety of online courses which can be applied toward an associate's degree, certificate program, continuing education units, or taken for enrichment. MCC also offers a growing number of programs that are completely attainable by taking only online courses. These online programs may be completed within the same timeframe online as they can be completed by taking traditional classroom courses. MCC Online provides students with the opportunity to earn certificates and degrees online (not all programs are available). In addition, the wide variety of online courses will apply toward an associate's degree, certificate program, be used for continuing education units, or even audited for enrichment.

## MCC Online

MCC Online provides schedule flexibility and access to a college degree, certificate or courses for students whose personal circumstances make attending regularly scheduled, on-campus classes an inconvenience or impossibility. Online courses differ in length and start at various times throughout the semester. The most current DE course schedule information is available on the MCC Web site at [www.mohave.edu](http://www.mohave.edu) at the catalogs/schedule link.

All MCC online courses use the ANGEL Learning System™ (ANGEL). Students may access MCC's online ANGEL Essentials, an online orientation about ANGEL, at <http://angel.mohave.edu>.

A list of minimum computer hardware, software and Internet connection requirements is provided at [www.mohave.edu/DE](http://www.mohave.edu/DE). Some courses require supplemental software. These requirements are included with the course listing within the course schedule.

#### Interactive Television Courses (ITV)

MCC offers Interactive Television courses, which use audio/video technology to connect campus classrooms where students see, hear and talk with their instructor and classmates at other campuses. The instructor may teach the class from any campus and may rotate between campuses during the semester. ITV courses require on-campus attendance and meet at regularly scheduled days and times.

#### Hybrid and Web-Enhanced Courses

Hybrid courses integrate online and in-class instruction in a complementary manner to combine the best features of both. Classroom time is reduced but not eliminated. Actual class meeting times are listed in the course schedule. Hybrid courses require the same computer availability, hardware and software as online courses.

All MCC ITV and ground courses are

Web-enhanced and utilize ANGEL to support the classroom learning experience. Instructors will provide specific directions and guidance for the online portions of Web-enhanced courses. Note: Computers with Web access are available in the MCC libraries at all campuses.

Textbooks and materials for online, ITV and Hybrid classes can be purchased at each campus bookstore.

#### Success in Distance Education Courses

Along with the schedule flexibility offered by online classes, technical capabilities and personal time management/study skills are needed to succeed. Students taking online courses must be accomplished in:

- Computer operations/concepts
- E-mail basics
- Word processing skills
- Internet/World Wide Web navigation
- Self-directed study habits
- Personal time management

#### Technical Assistance

MCC offers a 24/7 technical support Help Desk for all students. The MCC Distance Education Office also provides technical assistance during regular business hours.

#### Contact DE

Visit [www.mohave.edu/de](http://www.mohave.edu/de) or call the MCC Distance Education Office at 928.757.0867.

### Non-Academic Services

#### Career Services

The career services program offers career counseling for students at Mohave Community College. Students are guided as they discover areas of occupational interest, develop plans for training and/or employment and take steps that will lead to entry into the job market. For more information, contact an academic and career advisor.

#### Disability Services

Each campus has a disability services operations specialist who coordinates as-



sistance to people with disabilities. These individuals provide disability accommodations, information and referral services. They serve as a connecting link between students with disabilities and the college. Students needing accommodations should contact a disability services operations specialist before registering for classes. The college requires six weeks' notice to provide disability related accommodations. For more information, contact the campus disability services office.

### Food Services

All four campuses have food vending areas.

### Housing

Mohave Community College does not have residence halls.

### Parking

Student parking is provided at MCC campuses. Student and guest driving behavior should be consistent with laws and regulations established by the state and with those established by the college. Vehicles parked illegally will be towed at the owner's expense. Students must obtain an MCC parking sticker from campus student services at the time of registration.

### Small Business

#### Development Center (SBDC)

MCC features a variety of programs designed to assist its students and the communities it serves. Business owners and those who would like to start their own business are encouraged to use the free counseling services that are available through the Small Business Development Center (SBDC). Assistance can be obtained by contacting the SBDC at 928.757.0894.

### Student Life

MCC offers many opportunities for student growth outside the classroom. To get the most out of college, students are encouraged to participate in the cultural, social, enrichment and recreational activities offered.

## Academic Expectations

### General Education Philosophy

MCC recognizes that learning is a lifelong process of analysis and synthesis through which students incorporate into their own world views the traditional and cumulative knowledge of human experience. MCC's general education curriculum has been designed to expand students' awareness of the diversity of human knowledge and accomplishment and to expand their conceptual framework beyond that of any single academic discipline. MCC's general education curriculum provides a foundation for students in the academic areas of knowledge, and provides students with the skills necessary to cope in a complex and diverse world.

The general education curriculum at MCC is designed to provide students with the following:

- Aesthetic Sensibilities
- Communication Skills
- Critical Thinking Skills
- Cultural Sensitivity
- Global Awareness
- Problem-Solving Skills
- Techniques of Inquiry
- Technological Competency

### Writing Across the Curriculum

Mohave Community College firmly supports the idea that writing can be used to improve education. Students who write in their respective content areas will learn more and retain what they learn better than those who don't. Courses in the core curriculum have been identified as "Writing Across the Curriculum" courses. These courses will require written assignments for which both the content and the writing skills will be evaluated. Feedback will be given to the students to improve their written communication skills. MCC believes that such a program will increase the writing ability of students and will directly affect their success at transfer institutions and in the business where they may be employed. Writing is a basic and fundamental communication skill. Those who write well

will increase the probability of their success in whatever field or profession they choose to pursue.

## Student Conduct

### Student Academic Honor Code

To support a climate of academic honesty, Mohave Community College adopts an Honor Policy that reflects the fundamental right of all students to an education. It is based on a code of academic integrity and responsibility within the college community. The Honor Policy gives the responsibility for assuring academic integrity to the entire college community - students, faculty and the academic administration. Mohave Community College expects students to engage in all academic pursuits in a manner that is beyond reproach, and it expects faculty and the academic administration to fully support the MCC Honor Policy. Students found in violation of the Honor Policy that follows are subject to academic, and where appropriate, disciplinary penalty.

### Academic Honor Code

The Honor Code is the promise made by all members of the Mohave Community College community to uphold the MCC Honor Code.

#### *The Code states:*

We, the members of the Mohave Community College academic community, hereby resolve to uphold individually and collectively the honor of the college by doing all that is within our power to prevent any form of dishonesty in our academic work. This includes, but is not limited to, refusing to participate in any acts of cheating, fabrication, stealing, plagiarism, misrepresentation, collusion or facilitating the academic dishonesty of another.

### Student Behavior

Mohave Community College acknowledges that in the course of discussion, debate and classroom lectures, individuals may find certain topics disagreeable or uncomfortable.

These circumstances are an inevitable component of the learning process and

## Attending MCC



should not be considered detrimental when conducted with respect and courtesy. However, Mohave Community College has zero tolerance for threatening or violent language or behavior among its employees, students, or visitors. Examples of such behavior include but are not limited to: threats of intended violence against persons or property, physical assault on persons or property, verbal assault such as name calling, degrading, screaming, threatening, criticizing, berating or humiliating, comments of intentional racial, ethnic, religious or sexual insult, actions of harassment such as bullying, hazing, pushing or stalking and other demonstrations of immediate or planned violence. Weapons of any kind are prohibited on campus or at any off-campus college function unless specifically approved as part of a classroom activity. Offenders will be prosecuted to the full extent of the law.

### Attendance

Regular, punctual attendance is recommended in all credit courses. Any class or lab session missed, regardless of cause, reduces the opportunity for learning and may affect achievement. Students are re-

sponsible for notifying the instructor of any anticipated absences. The instructor has the prerogative to decide whether the student will be permitted to make up work missed during the absence. Programs involving clinical or off-campus assignments may require telephone notice of all absences. The college has no leave of absence policy for students. Instructors are encouraged to be considerate of students with special circumstances.

### Participation

Each instructor will inform students by means of a syllabus of class participation requirements at the first class meeting. Instructors of Mohave Community College are required to include points for classroom participation. These points make up no less than 15 percent of the total points for the course.

### Academic Amnesty

Mohave Community College permits students to have up to two consecutive terms of 100-and 200-level coursework excluded from figuring in their academic standing, cumulative grade point average, and eligibility for degree or certificate completion.

Academic amnesty can be granted only once, is irrevocable, and applies to ALL 100-and 200-level courses in the entire term, no matter what the grade (A-F).

Since all amnesty designated grades remain on the student's transcript, other educational institutions may consider all coursework listed on the transcript when a student transfers.

The coursework to be amnestyed must have been taken at least five years previous to the time of the request. **Example:** a petition for courses taken in the fall semester of 2011 cannot be submitted until the end of the fall semester of 2016. This request cannot be processed if the student is indebted to the college in any way.

### Use of Electronic Devices

The use of cell phones and all other electronic devices during testing situations is strictly prohibited.

### Zero-Level Courses

Zero-level courses are pass/fail (S/U) graded courses and are not intended for college transfer. They do not count toward degree or certificate requirements and are not part of the grade point average calculation. However, zero-level courses may be required prior to enrollment into a course(s) needed for graduation. This would be determined by assessment testing and degree/certificate requirements.

### Dean's List

Students who, in the semester under consideration, have earned at least 12 semester hours in courses numbered 100 or above with a semester grade point average of 3.5 or better, are eligible for the dean's list. Students who have met the qualifications will be recognized as superior students by the college, and their names will be published on the dean's list each semester.

Students receiving a grade of "I" may be eligible for retroactive placement on the list upon conversion of the "I" to a permanent grade.

### Student Honors List

Part-time students who have accumulated

12 or more credit hours of 100 level or above at MCC may be eligible for the honors list. To qualify for the list, students must have completed a minimum of six credits in courses numbered 100 or above, with a GPA of 3.5 or better, in the semester under consideration. Students who qualify for this list will be recognized by the college and their names will be published on the honors list.

Students receiving a grade of "I" may be eligible for retroactive placement on the list upon conversion of the "I" to a permanent grade.

### Academic Probation

A student's cumulative grade point average (GPA) must remain at a minimum of 2.0 or better for a student to continue working toward a degree/certificate without restrictions.

If the student's cumulative GPA falls below the minimum of 2.0, the student will be placed on academic probation. The student will remain on academic probation as long as his/her semester or summer GPA is 2.0 or above and his/her cumulative GPA is less than 2.0. If, while the student is on academic probation, s/he earns less than a 2.0 GPA for the following semester or summer term, s/he will be academically dismissed. While on probation, the student will be limited to a maximum course load of 10 credit hours per semester or six (6) credit hours per summer term.

When the student improves his/her cumulative GPA to equal to or higher than the minimum, the student will be removed from academic probation. The GPA must remain at 2.0 or higher to avoid academic probation.

### Academic Dismissal

Academic dismissal is defined as: the written notification from the registrar that the student has been dismissed from MCC for one semester (fall/spring) on the basis of his/her academic record. Students meeting the criteria for academic probation for two consecutive semesters will be subject to dismissal. Students who have been dismissed and want to reapply can do so after



one semester of non-registration by following the procedure listed below.

### Readmission for Academically Dismissed Students

Students who are academically dismissed cannot enroll in any classes during the fall/spring semester following their dismissal. Those who wish to be considered for readmission after that semester must seek approval from their local campus academic chair. A request for readmission must be made in writing and must include reasons why readmission should be considered. If the request is approved, the student will be required to meet with a campus director of student services to formulate a detailed plan for course completion. Students who are readmitted will have a restricted academic load. Upon readmission, the campus academic chair will notify the registrar and the Offices of Instruction and Student Services of the decision and explain the academic restrictions. Readmission to the college does not necessarily mean readmission to a specific program.

### Student Guarantee Program

Any associate of applied science graduate

who is judged by his/her employer to be lacking in the technical job skills identified in the exit competencies for his/her specific degree program will be provided up to nine tuition-free credit hours of additional skill training if they meet all of the following conditions:

- The graduate must have earned the AAS degree, by or after May 1990, in an occupational program identified in the college catalog.
- The graduate must have completed the AAS degree at MCC (with a majority of the credits being earned at MCC) and must have completed the degree within a four-year time span.
- Graduates must be employed full-time in an area directly related to the area of program concentration.
- Employment must commence within 12 months of graduation.
- The employer must certify, in writing,



that the employee is lacking entry-level skills identified by MCC as the employee's program competencies and must specify the areas of deficiency within 90 days of the graduate's initial employment.

- The employer, graduate, faculty and academic chair are to develop a written education plan for retraining. The plan is to be approved by the dean of instruction.
- Retraining will be limited to nine credit hours related to the identified skill deficiency and those classes regularly scheduled during the period covered by the retraining plan.
- All retraining must be completed within a calendar year from the time the educational plan is agreed upon.
- The graduate and/or employer is responsible for cost of books, insurance, uniforms, fees and other course-related expenses.

- The guarantee does not imply that the graduate will pass any licensing or qualifying examination.
- The graduate's sole remedy against MCC and its employees for skill deficiencies shall be limited to nine credit hours of tuition-free education under conditions described above.

### Grades

At the end of the semester, students will receive grades in each of their courses.

MCC does not require a mid-term grade. However, students doing below-average work will be notified by the faculty member. Grades will not be recorded for cancelled courses.

MCC student grades are available online at <https://jics.mohave.edu>. If students believe they have been given an unfair grade, they may pursue an appeal of the grade by following the procedure specified in the MCC Student Handbook located at [www.mohave.edu](http://www.mohave.edu).

### Grading System

All grades earned will remain on the official transcript. Letter grades earn grade points according to the "Grading Standard" schedule.

### Grading Standards

Mastery of course objective with outstanding quality of academic achievement	A	4
Mastery of course objectives with high quality of academic achievement	B	3
Mastery of all course objectives	C	2
Mastery of some course objectives	D	1
Lack of mastery of course objectives	F	0
Mastery of course objectives (C or better) in Zero level courses	S	0
Lack of mastery of course objectives in Zero level courses	U	0
Adequate progress in early course objectives; mastery of all course objectives has not yet been met. PCS/ELA prefixes only	PR	0

### Withdrawal W 0

Must be student requested with the appropriate form within the official withdrawal period. Students not completing the appropriate withdrawal procedure will receive an "U" or an "F" in the course.

### Administrative Withdrawal WR1 0

This grade is given by faculty to a student who is enrolled, but who has never attended or participated.

### Administrative Withdrawal WR2 0

This grade is given by administration to a student for NON-PAYMENT.

**Administrative Withdrawal WR3 0**  
 This grade is given by administration to a student for disruptive behavior.

**Administrative Withdrawal WR4 0**  
 This grade is given by administration when the student is deceased.

**Audit AU 0**  
 No credit

**Incomplete I 0**  
 A temporary designation generally given only in an emergency situation, such as illness, which results in the student's inability to complete objectives. A student must have successfully completed 75 percent of the course objectives, as determined by the instructor for the "I" designation.

This "I" designation must be changed to a permanent grade other than "W" within a period of time determined by the faculty member at the time the "I" designation is assigned. The period to complete objectives shall not exceed seven weeks after the last official day of the course, or the course grade will be converted to an "F."

A written agreement by the faculty member specifying the necessary objectives and period of time within which those need to be completed shall be sent to the student with a copy to the student's permanent file in the Office of the Registrar.

## Graduation

### Requirements

To earn a degree, students must have acquired a minimum of one-third of the required 100-level or above credit hours at MCC. These hours must count toward the degree being earned.

To earn a certificate of proficiency, students must have acquired a minimum of one-third of the required 100-level or above credit hours at MCC. These hours must count toward the certificate being earned.

Students must meet MCC's ongoing enrollment requirements in order to be subject to



the catalog of initial enrollment. Students not meeting MCC's ongoing enrollment requirements will fall under the catalog requirements currently in effect.

Substitution of a course must be requested, in writing, by a director of student services or an academic and career advisor and verified by the appropriate academic chair or program director. The Course Substitution Form must be submitted by the academic chair/program director to the Office of the Registrar for final approval.

All degrees, certificates and AGEC course blocks require a "C" or better in each course and a cumulative grade point average of 2.0 or better.

Students must have resolved any indebtedness to the college before their degree/certificate is awarded.

Students who apply to graduate and do not complete all requirements by the end of the term for which they applied must reapply to graduate.

Students who apply to graduate and are

not currently enrolled at MCC, must apply within two full semesters (fall/spring, spring/fall) of their last date of attendance. If they do not apply within that timeframe, the application will automatically be assigned to the current catalog, and the student will have to meet that catalog's graduation requirements.

### Application for Graduation

Students must meet with their local campus advising staff for initial review of their degree/certificate of proficiency program requirements at least one semester before applying for graduation.

Students must meet with their local campus advising staff to complete a graduation application during their anticipated semester of completion.

Completed graduation applications must be submitted to the Office of the Registrar by the following dates: November 1 for December graduates, March 1 for May graduates, March 1 for summer graduates planning to attend the annual commencement ceremony in May and June 1 for all other summer graduates.



### To graduate with Honors, Certificate of Proficiency students must:

- Have completed a minimum of one half of their certificate program at MCC.
- Have an overall cumulative 4.0 GPA for all MCC courses completed by the end of the semester in which they have applied for graduation.

### Commencement Ceremony

MCC conducts one formal commencement ceremony each May. Students who have filed a graduation application by the appropriate deadlines may participate in the ceremony. Students must purchase a cap and gown to be eligible to participate in the commencement ceremony. Caps, gowns and commencement announcements are available at local MCC campus bookstores. Participation in the commencement ceremony does not guarantee graduation. Students who are receiving a certificate of completion are not eligible for commencement, nor is this certificate posted on their MCC transcripts.

### Evaluation of Graduation Applications

The registrar evaluates the Graduation Application by reviewing a student's MCC transcript, applicable transfer credits, and cumulative grade point average.

**Note:** Transfer classes count toward total credits earned for graduation, but are not calculated in the graduating student's cumulative GPA.

If a student has met all degree/certificate of proficiency requirements, approval is given by the registrar for the awarding of the degree/certificate, and the degree/ certificate is then listed on the student's transcript.

Degrees and certificates of proficiency are mailed by the Office of the Registrar.

Students should allow a minimum of 10 business weeks after the end of the graduation term for applications to be processed.

### Graduation with Honors

#### To graduate with Honors, Degree Students must:

- Have completed a minimum of 30 semester hours of their degree program at MCC.
- Have an overall cumulative 3.75 GPA for all MCC courses completed by the end of the semester in which they have applied for graduation.

## TRANSFER CORES

Arizona General Education Curriculum (AGEC)  
 AGECE-A - Arts  
 AGECE-B - Business  
 AGECE-S - Science

## DEGREES

Associate of Arts (AA)  
 Associate of Business (ABus)  
 Associate of Science (AS)  
 Associate of Applied Science (AAS)  
 Associate of General Studies (AGS)

### Associate of Arts (AA)

Administration of Justice  
 Art  
 Elementary Education Emphases
 

- Early Childhood Education
- Language Arts
- Mathematics
- Science
- Social Studies

English  
 History  
 Liberal Arts  
 Mathematics  
 Science  
 Social Studies  
 Social and Behavioral Science

### Associate of Business (ABus)

Computer Information Systems  
 Business Administration

### Associate of Science (AS)

Chemistry  
 Geology  
 Life Science

### Associate of General Studies (AGS)

Automotive Service Technology

## CERTIFICATES

Certificate of Completion  
 Certificate of Proficiency

## PROGRAMS OF STUDY Degrees and Certificates

### Administration of Justice

AA Degree - Administration of Justice  
 Certificate - Corrections Officer

### Automotive Technology

AAS Degree - Automotive Collision Repair Technology  
 AGS Degree - Automotive Service Technology

### Business

ABus Degree - Business Administration  
 AAS Degree - Accounting  
 AAS Degree - Business and Entrepreneurship  
 AAS Degree - General Business  
 Certificate - Bookkeeping  
 Certificate - Business and Entrepreneurship  
 Certificate - Supervisor

### Child Development

Associate Pathway  
 Credential Preparation - Child Development Associate (CDA)

### Chemical Dependency Studies

AAS Degree - Chemical Dependency Studies

### Computer Information Systems

ABus Degree - Computer Information Systems  
 AAS Degree - Computer Information Systems  
 AAS Degree - Systems Administration  
 Certificate - Computer Graphics & Web Design  
 Certificate - Systems Support & Security  
 Certificate - Professional Applications  
 Certificate - Programming & Game Development  
 Certificate of Completion - Essential Computer Technology

### Culinary Arts

AAS Degree - Culinary Arts & Hospitality  
 Certificate - Baking and Pastry  
 Certificate - Culinary Arts & Hospitality

### Dental

AAS Degree - Dental Hygiene  
 Certificate - Dental Assisting

### Education

AA Degree - Elementary Education with content emphasis in:
 

- Early Childhood Education
- Language Arts
- Mathematics
- Science
- Social Studies

### Electrical Technology

AAS Degree - Electrical Technology  
 Certificate - Electrician  
 Certificate - Electrical - Industrial Maintenance  
 Certificate - Electrical - Residential Wiring

### Fire Science

AAS Degree - Fire Science  
 Certificate - Fire Fighter  
 Certificate - Driver / Operator  
 Certificate - Fire Officer

### General Studies

AAS Degree - General Studies

### Heating, Ventilation, & Air Conditioning (HVAC)

AAS Degree - Refrigeration Technology  
 Certificate - Commercial Refrigeration  
 Certificate - Residential HVAC

### Liberal Arts & Sciences

AA Degree - Art  
 AA Degree - Chemistry  
 AA Degree - English  
 AA Degree - Geology  
 AA Degree - History  
 AA Degree - Life Science  
 AA Degree - Mathematics  
 AA Degree - Science  
 AA Degree - Social and Behavioral Science  
 AA Degree - Social Studies

### Medical Assisting

AAS Degree - Medical Assisting  
 Certificate - General  
 Certificate - Insurance Coding  
 Certificate - Phlebotomy

### Nursing

AAS Degree - Nursing (RN)  
 AAS Degree - Accelerated Nursing for Paramedics  
 Credential Preparation
 

- Nursing Assistant (CNA)
- Certified Medication Assistant

## Programs of Study

Refresher - Nurse Refresher Programs  
(LPN and RN)

### Paralegal

AAS Degree - Paralegal  
Certificate - Paralegal  
Certificate - Post-Degree Paralegal

### Paramedic

AAS Degree - Paramedic Emphasis  
Certificate - Paramedic

### Pharmacy Technology

AAS Degree - Pharmacy Technology  
Certificate - Pharmacy Technology

### Physical Therapist Assistant

AAS Degree - Physical Therapist Assistant

### Radiologic Technology

Partnership with Arizona Western College

### Surgical Technology

AAS Degree - Surgical Technology

### Truck Driver Training

Certificate - Truck Driver Training

### Welding Technology

AAS Degree - Welding Technology  
Certificate -

- Wire Feed & Shielded Metal Arc Welding (SMAW)
- Gas Tungsten Arc Welding (GTAW)
- Gas Metal Arc Welding (GMAW)
- Entry-Level I Welder
- Entry-Level II Welder

*NOTE: Certain degree and certificate programs are offered only at specific campuses. For information on availability of programs on your particular campus, contact Student Services.*

## Degree Information

Mohave Community College offers the Associate of Arts (AA), Associate of Business (ABus), Associate of Science (AS), Associate of General Studies (AGS) and the Associate of Applied Science (AAS) degrees. A student may earn only one AA, ABus or AS degree. A student may earn multiple AAS degrees, depending on the discipline.

Once a student has earned one of these degrees, any of the other degrees can be earned by completing the additional degree requirements with a minimum of fifteen (15) additional MCC credits beyond the previous degree. Degrees may be earned concurrently.

**Example:** A student has earned an AA degree with 64 credits and wishes to earn an AAS degree. The student must complete a minimum of an additional fifteen (15) MCC credit hours and meet all of the requirements of the AAS degree. The student, therefore, would have a minimum total of 79 credit hours.

A student who completes a degree program and elects to pursue another degree is subject to the degree requirements of the catalog in effect at the time the student declares the new degree. A new Degree Declaration Form must be filled out at the time.

### Associate of Arts (AA), Associate of Business (ABus), and Associate of Science (AS)

The Associate of Arts, Business, and Science degrees are designed to enable students to transfer course credits to a college or university granting the baccalaureate degree. Students following these programs will have taken the university parallel requirements in general education.

Students must complete the courses in these programs of study with a "C" or better and have an overall cumulative grade point average of 2.0 or better in order to graduate.

### Associate of Applied Science (AAS)

The Associate of Applied Science degree is intended to prepare the student for entry into a vocational area or to upgrade skills of persons already employed. The 15 hours of general education courses introduce skills needed and desired by employers and employees. The remaining hours include course work to develop skills in the vocational and related areas. Students must complete the courses in the program of study with a "C" or better and have a cumulative grade point average of 2.0 or

better in order to graduate. (See AAS Gen. Ed. checklist.)

Since AAS programs are designed to prepare students for employment in the respective occupational areas, it is necessary that the student follow the program content and sequence as outlined. Any departure from the outlined program must be approved by the appropriate faculty and administration. The specific occupational content is set forth in the program outlined within the respective areas of study.

### Associate of General Studies (AGS)

The Associate of General Studies degree is intended to prepare the student for entry into an occupational area. All course work is related to the student's occupational goal with general education requirements embedded within the courses. Students must complete the courses in the program of study with a "C" or better and have a cumulative grade point average of 2.0 or better in order to graduate.

**Advising note:** The AAS and AGS are not transfer degree programs; however, some courses may transfer. In pursuing a baccalaureate degree after completing the AAS or AGS, some general education and program area courses may be acceptable for transfer credit. However, some courses in technical programs are so specialized that many colleges and universities do not offer equivalent training and they may not grant transfer credit. Students in this degree program will most likely be required to take additional freshman and sophomore general studies courses. Students must have earned a "C" or better in transferable course work in order to transfer credit.

The Course Equivalency Guide and the transfer guides are designed to help students, with consultation with an advisor, to understand the transfer process. (See: [www.AZTransfer.com](http://www.AZTransfer.com))

### Beyond MCC - Understanding Transfer

MCC has partnerships with many universities. Understanding the ideas and vocabulary for transfer to a university or other Arizona community college will help ease the transfer process.



### AGEC Block

The Arizona General Education Curriculum (AGEC) is a block of 35 semester hours of lower division general education course work. Courses specific to this curriculum are listed in the degree and certificate information section of this catalog as the General Education Curriculum for AA, ABus and AS degree programs. The block can be completed by itself or as part of an associate's degree at MCC. The college certifies completion of an AGECE on the student's transcript when applied for by the student.

A completed AGECE will transfer as a block to any of the three Arizona public universities (NAU, ASU, and U of A). The AGECE will meet lower-division university general education requirements. To earn a baccalaureate degree, students transferring the AGECE must still meet other university requirements within their chosen major.

A completed AGECE will also transfer as a block to meet the general education requirements at other public Arizona community colleges. Transfer students who wish to earn an associate's degree must then meet additional community college degree requirements of that particular institution. (See AGECE checklists.)

*Effective Fall 2010: All courses used to satisfy Arizona General Education Curriculum (AGECE) requirements must be transferable as elective credit or better<sup>1</sup> to all Arizona public universities.*

*All courses used to satisfy remaining Associate Degree requirements<sup>2</sup> must be transferable as elective credit or better to the university and major to which the Associates degree is intended to transfer. However, if the baccalaureate degree is a shared major<sup>3</sup>, offered by more than one university, the courses must transfer as elective credit or better to all the universities offering the shared major.*

### Definitions

<sup>1</sup>**Elective or better** - Identified in the Course Equivalency Guide (CEG) as Elective (E), Departmental Elective Credit (DE), or a Direct Equivalency.



### <sup>2</sup>Remaining Associate Degree

**Requirements** - Courses used to complete associate degree requirements beyond the courses of the AGECE such as Common Courses, Electives, Prerequisites, etc. These degrees include the Associate of Arts (AA), Associate of Business (ABus), Associate of Science (AS).

<sup>3</sup>**Shared Major** - A shared major is a university degree program that has similar academic preparation to one or more degree programs at other Arizona public universities as listed on the Common Course Matrices.

### Types of Transfer

**A.** The AGECE Block will transfer to the state of Arizona public institutions – the state universities (ASU, NAU, U of A) and community colleges. When a student completes and applies for the AGECE, the student's transcripts will note the completion of the AGECE. The completed AGECE will meet the general education requirements (also known as liberal studies requirements) for Arizona's public, higher education institutions. Students should be aware that universities and departments may have other requirements apart from the AGECE (see the "University

Admissions Requirements" in this catalog).

- B.** Individual Courses (credits) can transfer to a university in three different ways:
- 1.** Direct equivalency or one-to-one course transfer - an MCC course has a direct transfer to a university course, e.g. MCC's SOC 131 = ASU's SOC 101
  - 2.** Departmental Elective - A university may not offer the same course as an MCC course, but the department will accept it as an elective for their department. This is helpful especially when the department has a requirement for departmental electives, but if they don't, the course may count as a university elective.
  - 3.** General Elective - The course will only transfer as a general elective; it will not transfer as a direct equivalent (one-to-one) or a departmental elective. In this case, it can be used to meet the number of credits needed to graduate.

### Arizona Higher Education Course Equivalency Guide

The Arizona Commission for Postsecondary Education, in conjunction with the Arizona

## Programs of Study



Board of Regents, publishes the Arizona Higher Education Course Equivalency Guide (CEG) and transfer pathway information at: [www.AZTransfer.com](http://www.AZTransfer.com)



The CEG “equivalency” does not mean that the community college course is identical to the university course or vice-versa, but that the course is regarded as fulfilling the requirement of the designated university or college course. The evaluations of transfer credit in the CEG refer only to community college courses and their acceptance at the respective four-year institutions in the state of Arizona. Students are encouraged to consult with the appropriate transfer institution’s academic department for major course requirements before deciding on current class schedules. (See the transferable courses chart in this catalog.)

### University Admissions Requirements

Below are examples of requirements of some universities:

- Application (with fee) at least one semester before attendance
- Liberal Studies requirements (AGEC will satisfy for AZ public universities in the state system)
- Junior-level writing requirement
- Diversity course requirements
- Electives
- Minimum number of courses taken at their university
- Number of 300-400 level courses
- Number of credits to graduate (usually 120)

### Program/Major Requirements

There may be requirements for the major or program, e.g. School of Education (Elementary Education), School of Business (Accounting, Business Administration).

Below are some examples of requirements from a program:

- Application to program (apart from application to and acceptance in the university)
- Prerequisite courses to enter program
- Core courses within program

### MCC Partner Institutions

MCC has articulation agreements with institutions of higher education to enable students to pursue their upper division studies. Articulation agreements formally recognize that these institutions and MCC will work together to facilitate the transfer of associate degree conferred students from MCC into baccalaureate programs.

- **Arizona State University**  
[www.asu.edu](http://www.asu.edu)
- **Arizona Western College**  
[www.azwestern.edu](http://www.azwestern.edu)
- **Capella University**  
[www.capella.edu](http://www.capella.edu)
- **Chamberlain College of Nursing, LLC**  
[www.chamberlain.edu](http://www.chamberlain.edu)
- **Colorado Technical University, Online Division**  
[www.ctuonline.edu](http://www.ctuonline.edu)
- **Jones International University**  
[www.jiu.edu](http://www.jiu.edu)
- **Kaplan University**  
[www.getinfo.kaplan.edu](http://www.getinfo.kaplan.edu)
- **Northcentral University**  
[www.ncu.edu](http://www.ncu.edu)
- **Northern Arizona University**  
[www.nau.edu](http://www.nau.edu)

- **Palmer College of Chiropractic-Davenport Campus**  
[www.palmer.edu](http://www.palmer.edu)
- **Regis University - School of Professional Studies**  
[www.regis.edu](http://www.regis.edu)
- **Saint Joseph’s College of Maine**  
[www.sjcme.edu](http://www.sjcme.edu)
- **Southern Utah University**  
[www.suu.edu](http://www.suu.edu)
- **University of Arizona**  
[www.arizona.edu](http://www.arizona.edu)
- **University of Maryland University College**  
[www.umuc.edu](http://www.umuc.edu)
- **University of Phoenix**  
[www.phoenix.edu](http://www.phoenix.edu)
- **Upper Iowa University - Extended University**  
[www.uiu.edu/eu\\_students/online/index.html](http://www.uiu.edu/eu_students/online/index.html)
- **Western Governors University**  
[www.wgu.edu](http://www.wgu.edu)
- **Western International University**  
[www.west.edu](http://www.west.edu)

## Certificates

### Certificate of Completion (AGEC only)

This certificate is awarded after successful completion of a series of specific courses and is clearly identified in the catalog. Students must complete all required courses with a “C” or better and have a cumulative grade point average of 2.0 or better. A Certificate of Completion is not awarded at commencement. AGEC Certificates of Completion will be designated on a student’s MCC transcript.

### Certificate of Proficiency

MCC offers, in selected occupational and academic areas, certificate programs that are intended to improve students’ existing skills or provide competencies for employment. Successful completion of a course is defined as a grade of “C” or better. Students must have successfully completed all courses in the certificate and have a cumulative grade point average of 2.0 or better in all work completed at MCC, including courses not applicable to the certificate.

**Course Number & Course Title**

**ASU**

**NAU**

**U of A**

**ACCOUNTING**

ACC125 Introduction to Accounting using QuickBooks  
 ACC135 Accounting Systems and Procedures  
 ACC139 Income Tax Accounting

Elective  
 Elective  
 Elective

DE  
 DE  
 DE

Elective  
 Elective  
 Elective

**ADMINISTRATION OF JUSTICE**

AJS101 Intro to Administrative Justice  
 AJS109 Substantive Criminal Law  
 AJS140 Intro to Corrections  
 AJS200 Current Issues  
 AJS212 Juvenile Justice Procedures  
 AJS225 Criminology  
 AJS230 The Police Function  
 AJS240 The Correction Function  
 AJS245 Ethics in Criminal Justice  
 AJS260 Procedural Criminal Law  
 AJS270 Community Policing

CRJ360  
 CRJ260  
 CRJ240  
 CRJ DE, JUS200 SB  
 Elective  
 CRJ DE  
 CRJ230, JUS306  
 CRJ240  
 Elective  
 CRJ DE  
 CRJ270, SB, C

CCJ270  
 CCJ270  
 SOC240  
 CCJ DE  
 CCJ DE  
 CCJ250  
 CCJ220  
 SOC240  
 CCJ DE  
 CCJ 275  
 CCJ DE

Elective  
 Elective  
 Elective  
 Elective  
 Elective  
 PPOL DE  
 Elective  
 Elective  
 Elective  
 PA DE  
 Elective

**AMERICAN SIGN LANGUAGE**

ASL101 American Sign Language I  
 ASL102 American Sign Language II  
 ASL131 Conversational ASL I  
 ASL201 American Sign Language III  
 ASL202 American Sign Language IV

SHS101  
 SHS102  
 Elective  
 SHS201  
 SHS202

Elective  
 Elective  
 Elective  
 Elective  
 Elective

SERP370A  
 SERP370B  
 Elective  
 SERP431A  
 SERP431B

**ANTHROPOLOGY**

ANT102 Cultural Anthropology

ASB102, SSB G

ANT102

ANTHDE

**ART**

ART111 Design I  
 ART112 Design II  
 ART113 The Science of Color  
 ART121 Drawing I  
 ART125 Painting I  
 ART126 Painting II  
 ART128 Watercolor I  
  
 ART129 Watercolor II  
 ART130 Survey of World Art  
 ART151 Basic Black and White Photography  
 ART152 Basic Photography  
 ART162 Fibers  
 ART171 Ceramics I  
 ART172 Ceramics II  
 ART175 Sculpture I  
 ART176 Sculpture II  
 ART221 Drawing II  
 ART223 Figure Drawing I  
 ART230 Survey of World Art II  
 ART251 Intermediate Photography  
 ART256 Digital Photography

ART112  
 ART115  
 ART113  
 ART111  
 ART223  
 ART DE  
 ART227  
  
 ART227  
 ARS101  
 ART101  
 Elective  
 ART DE  
 ART261  
 ART DE  
 ART231  
 ART DE  
 ART211  
 ART214  
 ARS102  
 Elective  
 ART DE

ART150  
 ART151  
 ART DE  
 ART135  
 ART222  
 ART223  
 ART DE  
  
 ART DE  
 ARH141  
 PHO DE  
 Elective  
 ART DE  
 ART161  
 ART261  
 ART181  
 ART281  
 ART136  
 ART235  
 ARH142  
 PHO DE  
 PHO DE

ART102  
 ART104  
 ART DE  
 ART101  
 ART280  
 ART DE  
 ART285  
 & ART 285SA  
 ART DE  
 ARH201  
 ART241  
 ART DE  
 ART276  
 ART273  
 ART DE  
 ART287  
 ART DE  
 ART205  
 ART205  
 ARH202  
 ART DE  
 ART244

**ASTRONOMY**

AST101 Intro to Astronomy

AST112 & AST114

AST180

ASTR DE

## Transferable Courses

Course Number & Course Title	ASU	NAU	U of A
<b>BIOLOGY</b>			
BIO100 Biology Concepts	BIO100	BIO100	ECOL DE
BIO181 General Biology (Majors) I	BIO188	BIO181	ECOL 181R
BIO182 General Biology (Majors) II	BIO187	BIO182	ECOL182R
BIO201 Anatomy and Physiology I	BIO201	BIO201	PSIO201
BIO202 Anatomy and Physiology II	BIO202	BIO202	PSIO202
BIO205 Microbiology	BIO205 & MIC206	BIO205	MIC205A
BIO290 Field Biology I	Elective	Elective	Elective
BIO291 Field Biology II	Elective	BIO DE	Elective
<b>BUSINESS</b>			
BUS161 Marketing	Elective	Elective	Elective
BUS202 Legal Environment of Business	LES305	ACC205	Elective
BUS204 Business Communications	Elective	MGT DE	Elective
BUS206 Micro Economics	ECN212	ECO284	ECON201A
BUS207 Macro Economics	ECN211	ECO285	ECON201B
BUS208 Business Statistics	ECN221, JUS302 SWU321, QBA221	ECO201	MGMT276
BUS221 Financial Accounting	ACC231	ACC255	ACCT200
BUS222 Managerial Accounting	ACC241	ACC256	ACCT210
<b>CHEMICAL DEPENDENCY</b>			
CHD100 Foundations of Chemical Dependency	Elective	Elective	Elective
CHD102 Communication Skills in Chemical Dependency	Elective	Elective	Elective
CHD110 Biological Pharmacology of Chemical Dependency	Elective	Elective	Elective
CHD120 Professional Ethics in Counseling	Elective	Elective	Elective
CHD150 Principles of Self-Help Group	Elective	Elective	Elective
CHD161 Beginning Interviewing and Documentation Skills	Elective	Elective	Elective
CHD165 Theory and Techniques in Treatment	Elective	Elective	Elective
CHD220 Family Dynamics and Chemical Dependency	Elective	Elective	Elective
CHD226 Counseling Multicultural and Diverse Populations	Elective	Elective	Elective
CHD236 Recovery and Relapse of Chemical Dependency	Elective	Elective	Elective
CHD245 Dual Diagnosis	Elective	Elective	Elective
CHD250 Group Interventions with Chemical Dependency	Elective	Elective	Elective
CHD275 Advanced Theory and Techniques in the Treatment of Chemical Dependency	Elective	Elective	
CHD280 Chemical Dependency Practicum	Elective	Elective	Elective
CHD281 AIDS and Chemical Dependency	Elective	Elective	Elective
<b>CHEMISTRY</b>			
CHM130 Fundamental Chemistry	CHM101	CHM130	CHEM101A & CHEM DE
CHM151 General Chemistry I	CHM113	CHM151	CHEM151
CHM152 General Chemistry II	CHM116	CHM152	CHEM152
CHM235 General Organic Chemistry I	CHM233 & CHM237	CHM235	CHEM241A & CHEM 234A
CHM236 General Organic Chemistry II	CHM234 & CHM238	CHM238	CHEM241B & CHEM 243B
<b>COMMUNICATION</b>			
COM121 Interpersonal Communication	COM110	SC151	COMM114
COM151 Public Speaking	COM225	SC111, BA DE	COMM119
<b>COMPUTER INFORMATION SYSTEMS</b>			
CIS110 Intro. to Computer Information Systems	CSE180, CIS105	CIS120	MIS111
CIS141 Microsoft PowerPoint Presentations	GIT DE	Elective	Elective

**Course Number & Course Title**

**ASU**

**NAU**

**U of A**

CIS143	Web Page Design I	Elective	VC DE	MAR DE
CIS145	Photoshop I	GIT DE	VC DE	ART DE
CIS200	Programming and Game Dev. with Visual Basic.Net	GIT DE	Elective	Elective
CIS204	Programming and Game Development in C++	CST100 GIT DE	CS126	Elective
CIS208	Programming in C#	CSE182, CST100	CIS220	CSC DE
CIS245	Photoshop II	GIT DE	VC DE	ART DE
CIS270	Systems Analysis and Design	CIS235	CIS DE	Elective
CIS280	CIS Internship	Elective	Elective	Elective
CIS293	Special Project	Elective	VC DE	Elective

**EARLY CHILDHOOD EDUCATION**

ECE273	Play Education	Elective	ECI316	Elective
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**EDUCATION**

EDU200	Children's Literature	EED334, RDG334	ENG DE	ENG DE Elective
EDU205	Introduction to Education	CED111, TEL111	EDF200	Elective
EDU214	Cultural Diversity in Education	MCE230, TEL212	BME310	Elective
EDU222	The Exceptional Student	SPE222	ESE380	Elective
EDU240	Augmented Provisional Structure	BLE220	Elective	LRC DE
EDU250	Structured English Immersion	Elective	Elective	LRC DE

**EMERGENCY MEDICAL SERVICES**

EMS120	First Aid	Elective	HS229	PE DE
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**ENGLISH**

ENG101	English Composition I	ENG101	ENG101TR	ENGL101
ENG102	English Composition II	ENG102	ENG102TR	ENGL102
ENG136	Report Writing	ENG DE	Elective	ENG DE
ENG137	Intro to Literature	ENG DE	ENG130	Elective
ENG138	Creative Writing	ENG DE	ENG DE	ENGL101
ENG233	English Literature I	ENG221	ENG231	Elective
ENG234	English Literature II	ENG222	ENG232	ENGL DE
ENG235	American Literature I	ENG241	ENG242	ENGL265
ENG236	American Literature II	ENG242	ENG243	ENGL DE
ENG238	Writing Fiction	ENG210	ENG270	ENGL210

**ENVIRONMENTAL SCIENCE**

ENV101	Environmental Science	Elective	ENV101	SWES DE
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**FRENCH**

FRE101	Elementary French I	FRE101	FRE101	FREN101
FRE102	Elementary French II	FRE102	FRE102	FREN102
FRE201	Intermediate French I	FRE201	FRE201	FREN DE
FRE202	Intermediate French II	FRE202	FRE202	FREN DE

**GEOGRAPHY**

GHY212	Introduction to Meteorology	GPH212, GPH214	GGR DE	ATMO171
GHY213	Introduction to Climate Studies	GPH213, GPH215	GGR DE	ATMO DE
GHY240	World Regional Geography	GCU121	GGR241	GEOG251, LAS251, NES251

**GEOLOGY**

GLG101	Physical Geology	GLG101, GLG103	GLG101, GEOS251	GLG103
GLG102	Historical Geology	GLD102, GLG104	GLG102, GEOS DE	GLG 104

## Transferable Courses

Course Number & Course Title	ASU	NAU	U of A
GLG110 Environmental Geology/Natural Disasters GLG140 Intro to Oceanography	GLG110, GLG111 GLG DE	GLG112 GLG DE	GEOS DE GEOS212, GEOS DE
<b>GENERAL BUSINESS</b>			
GBS101 Intro to Business	Elective	MGT101	Elective
<b>HEALTH SCIENCE</b>			
HES129 Allied Health Anatomy & Physiology	BIO DE	Elective	Elective
<b>HISTORY</b>			
HIS131 History of the United States I	HST 109, HIS103	HIS291	HIST DE
HIS132 History of the United States II	HST110, HIS104	HIS292	HIST DE
HIS135 Western Civilization I	HST102	HIS240	HIST DE
HIS136 Western Civilization II	HST DE	HIS241	HIST DE
HIS137 Twentieth Century World History	HST DE	HIS DE	HIST DE
HIS234 History of Indians of North America	HST DE	HIS293	HIST236
HIS281 Latin American History	HST294	HIS281	HIST DE
<b>HUMANITIES</b>			
HUM150 Introduction to the Humanities I Pre-history to the Middle Ages	HTY DE	HUM101	Elective
HUM151 Introduction to the Humanities II Renaissance to the Present	HTY DE	HUM251	Elective
HUM250 Introduction to Cinema	FMP DE	HUM DE	TAR DE
<b>MATHEMATICS</b>			
MAT142 College Mathematics	MAT142	MAT114	MATH105
MAT151 College Algebra	MAT117	MAT110	MATH112 & MATH DE
MAT160 Math for Elementary Teachers I	MTE180	MAT150	MATHDE
MAT161 Math for Elementary Teachers II	MTE181	MAT155	MATHDE
MAT181 Plane Trigonometry	MAT DE	MAT DE	MATH111
MAT201 Finite Mathematics	MAT119	MAT119	MATHDE
MAT211 Introductory Statistics	STP226	STA270	MATH160
MAT212 Brief Calculus	MAT210	MAT131	MATH113
MAT221 Analytic Geometry and Calculus I	MAT270	MAT136	MATH124
MAT231 Analytic Geometry and Calculus II	MAT271	MAT137	MATH129
MAT241 Analytic Geometry and Calculus III	MAT272	MAT238	MATH223
MAT260 Introduction to Differential Equations	MAT274	MAT239	MATH254
<b>MUSIC</b>			
MUS101 Appreciation and Literature of Music	MUS340	MUS293	MUS107
MUS102 Fundamentals of Music	MUS100	MUS120	MUS100
MUS211 College Choir	MUP353	MUP357	MUS200I
MUS216 College Band	MUP361	MUP353	MUS200C
<b>NURSING</b>			
NUR122 Nursing II	Elective	NUR208	Elective
NUR221 Nursing III	Elective	NUR211	Elective
NUR222 Nursing IV	Elective	NUR212	Elective

Course Number & Course Title	ASU	NAU	U of A
<b>NUTRITION</b>			
NUT203 Human Nutrition in Health and Disease	NTR241	NTS DE	NSC DE
<b>PHILOSOPHY</b>			
PHI101 Introduction to Philosophy	PHI101	PHI101	PHIL111
PHI151 Ethics	PHI105	PHI105	PHIL113
PHI205 Comparative World Religions	REL100	REL150	RELI DE
<b>PHYSICS</b>			
PHY107 Conceptual Physics	PHS110	PSY107	Elective
PHY111 General Physics I	PHY111, PHY113	PHY111	PHYS102, PHYS181
PHY112 General Physics II	PHY112, PHY114	PHY112	PHYS103, PHYS182
PHY115 University Physics I	PHY121, PHY122	PHY161	PHYS141, PHYS DE
PHY116 University Physics II	PHY131, PHY132	PHY262	PHYS241, PHYS DE
<b>POLITICAL SCIENCE</b>			
POS100 Arizona Constitution and Government	POS DE	Elective	POL214
POS120 American National Government	POS110	POS110	POL201
POS227 United States Constitution	Elective	Elective	POL DE
<b>PSYCHOLOGY</b>			
PSY101 Introductory Psychology	PGS101	PSY101	PSY101
PSY135 Human Sexuality	PGS222	PSY277	PSY DE
PSY234 Social Psychology	PGS DE	PSY250	PSY DE
PSY240 Child Growth and Development	CDE DE	PSY DE	PSY240
PSY245 Lifespan Development	PGS DE	PSY240	PSY DE
PSY260 Introduction to Personality	PGS DE	PSY227	PSY DE
PSY270 Abnormal Psychology	PGS DE	PSY DE	PSY DE
<b>SOCIOLOGY</b>			
SOC131 Introduction to Sociology	SOC101	SOC101	SOC101
SOC132 Social Problems in Modern Society	SOC241	SOC210	SOC DE
SOC133 Sociology of Deviant Behavior	SOC DE	SOC441	SOC DE
SOC136 Marriage and Family	SOC DE	SOC216	SOC DE
SOC140 Racial, Ethnic and Gender Relations	SOC270	SOC215	SOC260
<b>SPANISH</b>			
SPA101 Elementary Spanish I	SPA101	SPA101	SPAN101
SPA102 Elementary Spanish II	SPA102	SPA102	SPAN102
SPA131 Conversational Spanish I	Elective	SPA DE	SPAN DE
SPA201 Intermediate Spanish I	SPA201	SPA201	SPAN201
SPA202 Intermediate Spanish II	SPA202	SPA202	SPAN202
<b>THEATRE</b>			
THE110 Beginning Acting (Nonproduction)	THP101	TH135	TAR 100
THE111 Theatre Production I	THP102	TH125	TAR DE
THE112 Theatre Production II	THE DE	TH112	TAR DE
THE113 Theatre Production III	TRE DE	TRE DE	TAR DE
<b>WOMEN'S STUDIES</b>			
WST101 Introduction to Women's Studies	WST100	WGS200	GWS DE

**DE= DEPARTMENTAL ELECTIVE**

# AGEC - A Checklist

## General Education and Transfer Degrees

### Associate of Arts (AGEC- A) General Education Core Requirements

The AGEC-A, a minimum block of 35 credit hours of lower-division general education course work, may be completed at any state of Arizona community college. The approved courses will fulfill lower-division, general education requirements at any state of Arizona university or community college. Students will be

required to fulfill the course prerequisites, major requirements and upper-division requirements specified by each university. This block of courses represents only the general education portion of a degree. See specific programs of study for total credit-hour requirements.



## Arizona General Education Curriculum (AGEC - A)

### A. Freshman Composition . . . . . 6

- English 101 English Composition I     English 102 English Composition II

### B. Mathematics . . . . . 3-4

- MAT 142 College Mathematics or [MAT 151\* College Algebra or a quantitative course that requires MAT 151 as a prerequisite.]

### C. Arts and Humanities (Choose two courses with different prefixes) . . . . . 6

- |   |   |
|---|---|
| <input type="checkbox"/> ART 130 Survey of World Art I      | <input type="checkbox"/> HUM 150 Introduction to the Humanities I     |
| <input type="checkbox"/> ART 230 Survey of World Art II     | <input type="checkbox"/> HUM 151 Introduction to the Humanities II    |
| <input type="checkbox"/> ENG 137 Introduction to Literature | <input type="checkbox"/> HUM 250 Introduction to Cinema               |
| <input type="checkbox"/> ENG 233 English Literature I       | <input type="checkbox"/> MUS 101 Appreciation and Literature of Music |
| <input type="checkbox"/> ENG 234 English Literature II      | <input type="checkbox"/> PHI 101 Introduction to Philosophy           |
| <input type="checkbox"/> ENG 235 American Literature I      | <input type="checkbox"/> PHI 205 Comparative World Religions          |
| <input type="checkbox"/> ENG 236 American Literature II     |   |

### D. Social and Behavioral Sciences (Choose two courses with different prefixes) . . . . . 6

- |   |   |
|---|---|
| <input type="checkbox"/> ANT 102 Cultural Anthropology    | <input type="checkbox"/> HIS 136 Western Civilization II              |
| <input type="checkbox"/> BUS 206 Micro Economics          | <input type="checkbox"/> HIS 137 Twentieth Century World History      |
| <input type="checkbox"/> BUS 207 Macro Economics          | <input type="checkbox"/> POS 120 American National Government         |
| <input type="checkbox"/> GHY 240 World Regional Geography | <input type="checkbox"/> PSY 101 Introductory Psychology              |
| <input type="checkbox"/> HIS 131 History of the U.S. I    | <input type="checkbox"/> SOC 131 Introduction to Sociology            |
| <input type="checkbox"/> HIS 132 History of the U.S. II   | <input type="checkbox"/> SOC 136 Marriage and Family                  |
| <input type="checkbox"/> HIS 135 Western Civilization I   | <input type="checkbox"/> SOC 140 Racial, Ethnic, and Gender Relations |

### E. Physical and Biological Sciences (Choose two courses) . . . . . 8

- |  |  |
|--|--|
| <input type="checkbox"/> AST 101 Intro. Astronomy      | <input type="checkbox"/> GLG 101 Physical Geology                        |
| <input type="checkbox"/> BIO 100 Biology Concepts      | <input type="checkbox"/> GLG 102 Historical Geology                      |
| <input type="checkbox"/> BIO 181 General Biology I     | <input type="checkbox"/> GLG 110 Environmental Geology/ Natural Disaster |
| <input type="checkbox"/> BIO 182 General Biology II    | <input type="checkbox"/> GLG 140 Intro to Oceanography                   |
| <input type="checkbox"/> CHM 130 Fundamental Chem.     | <input type="checkbox"/> PHY 107 Conceptual Physics                      |
| <input type="checkbox"/> CHM 151 General Chemistry I   | <input type="checkbox"/> PHY 111 General Physics I                       |
| <input type="checkbox"/> CHM 152 General Chemistry II  | <input type="checkbox"/> PHY 112 General Physics II                      |
| <input type="checkbox"/> ENV 101 Environmental Science | <input type="checkbox"/> PHY 115 University Physics I                    |
| <input type="checkbox"/> GHY 212 Intro to Meteorology  | <input type="checkbox"/> PHY 116 University Physics II                   |

### F. Options . . . . . 6-7

Select courses according to major and language proficiency requirements. Courses should be selected from Sections C, D, and E above. If two optional courses are chosen from section F below, select from two different prefixes.

#### Communication, Computer Information Systems, Critical Thinking & Logic, International/ Multicultural Studies & Language

- |   |  |
|---|--|
| <input type="checkbox"/> COM 121 Interpersonal Communications                 | <input type="checkbox"/> HIS 281 Latin American History      |
| <input type="checkbox"/> COM 151 Public Speaking                              | <input type="checkbox"/> PHI 205 Comparative World Religions |
| <input type="checkbox"/> CIS 110 Introduction to Computer Information Systems | <input type="checkbox"/> SPA 101 Elementary Spanish I        |
| <input type="checkbox"/> PHI 151 Ethics                                       | <input type="checkbox"/> FRE 101 Elementary French I         |
| <input type="checkbox"/> EDU 214 Cultural Diversity in Education              | <input type="checkbox"/> ASL 101 American Sign Language I    |
| <input type="checkbox"/> HIS 234 History of Indians of North America          |  |

## TOTAL MINIMUM HOURS CREDIT . . . . . 35-37

\*\*Please note that courses may have prerequisite requirements.





# AGEC - S Checklist

## Associate of Science (AGEC-S)

### General Education Core Requirements

The AGECS, a minimum block of 36 credit hours of lower-division general education course work, may be completed at any

Arizona community college. The approved courses will fulfill lower-division, general education requirements at any state of Arizona community college or state of Arizona university. Students will be required to fulfill the course prerequisites, major requirements, and upper-division

requirements specified by each university. This block of courses represents only the general education portion of a degree. See specific programs of study for total credit hour requirements.



## Arizona General Education Curriculum (AGEC - S)

### A. Freshman Composition . . . . . 6

- English 101 English Composition I       English 102 English Composition II

### B. Mathematics . . . . . 4

- MAT 221 Analytic Geometry and Calculus I  
or any course for which this is a prerequisite.

### C. Arts and Humanities (Choose two courses with different prefixes) . . . . . 6

- |   |   |
|---|---|
| <input type="checkbox"/> ART 130 Survey of World Art I                | <input type="checkbox"/> ART 230 Survey of World Art II           |
| <input type="checkbox"/> ENG 137 Introduction to Literature           | <input type="checkbox"/> ENG 233 English Literature I             |
| <input type="checkbox"/> ENG 234 English Literature II                | <input type="checkbox"/> ENG 235 American Literature I            |
| <input type="checkbox"/> ENG 236 American Literature II               | <input type="checkbox"/> HUM 150 Introduction to the Humanities I |
| <input type="checkbox"/> HUM 151 Introduction to the Humanities II    | <input type="checkbox"/> HUM 250 Introduction to Cinema           |
| <input type="checkbox"/> MUS 101 Appreciation and Literature of Music | <input type="checkbox"/> PHI 101 Introduction to Philosophy       |
| <input type="checkbox"/> PHI 205 Comparative World Religions          |   |

### D. Social and Behavioral Sciences (Choose two courses with different prefixes) . . . . . 6

- |   |  |
|---|--|
| <input type="checkbox"/> ANT 102 Cultural Anthropology                | <input type="checkbox"/> BUS 206 Micro Economics                 |
| <input type="checkbox"/> BUS 207 Macro Economics                      | <input type="checkbox"/> GHY 212 Introduction to Meteorology     |
| <input type="checkbox"/> GHY 240 World Regional Geography             | <input type="checkbox"/> HIS 131 History of the U.S. I           |
| <input type="checkbox"/> HIS 132 History of the U.S. II               | <input type="checkbox"/> HIS 135 Western Civilization I          |
| <input type="checkbox"/> HIS 136 Western Civilization II              | <input type="checkbox"/> HIS 137 Twentieth Century World History |
| <input type="checkbox"/> HIS 234 History of Indians in North America  | <input type="checkbox"/> HIS 281 Latin American History          |
| <input type="checkbox"/> POS 120 American National Government         | <input type="checkbox"/> PSY 101 Introductory Psychology         |
| <input type="checkbox"/> SOC 131 Introduction to Sociology            | <input type="checkbox"/> SOC 136 Marriage and Family . . . . .   |
| <input type="checkbox"/> SOC 140 Racial, Ethnic, and Gender Relations |  |

### E. Physical and Biological Sciences (Choose two courses in the same sequence) . . . . . 8-10

- |   |     |  |
|---|-----|--|
| <input type="checkbox"/> BIO 181 General Biology I    | and | <input type="checkbox"/> BIO 182 General Biology II    |
| <input type="checkbox"/> PHY 115 University Physics I | and | <input type="checkbox"/> PHY 116 University Physics II |

### F. Options (Choose two courses) . . . . . 7-8

Based on program/degree requirements and using a transfer guide or consulting advice from a university program advisor, select math courses above Calculus 1 and/or science courses from astronomy, biology environmental science, chemistry, geology, physics, or geography.

## TOTAL MINIMUM HOURS CREDIT . . . . . 37-40

\*\*Please note that courses may have prerequisite requirements.

## Associate of Applied Science (AAS)

**General Education Core Requirements**  
A minimum block of 15 credits hours

of lower-division general education coursework must be completed. The block of courses represents only the general education portion of an AAS degree. See your specific program of study for total credit hour requirements. The AAS is not

a transfer degree program; however, many of the individual courses listed in the core may transfer to any state of Arizona community college or state of Arizona university.



## AAS General Education Checklist

### Communications . . . . . 6

Choose **two** courses from the following list:

- |  |   |
|--|---|
| <input type="checkbox"/> ENG 101 English Composition I       | <input type="checkbox"/> ENG 102 English Composition II |
| <input type="checkbox"/> ENG 136 Report Writing              | <input type="checkbox"/> GBS 105 Business English       |
| <input type="checkbox"/> COM 121 Interpersonal Communication | <input type="checkbox"/> COM 151 Public Speaking        |
| <input type="checkbox"/> BUS 204 Business Communications     |   |

### Critical Thinking and Reasoning . . . . . 3-4

Choose **one** course from the following list:

- |   |   |
|---|---|
| <input type="checkbox"/> Any 100-level or above math, technical math, integrated or vocational math | <i>Any vocational ethics course</i>   |
| <input type="checkbox"/> Any 100-level or above laboratory science course                           | <input type="checkbox"/> AJS 245 Ethics in Criminal Justice                                 |
| <input type="checkbox"/> PHI 101 Introduction to Philosophy   | <input type="checkbox"/> GBS 175 Business Ethics and Social Responsibility                  |
| <input type="checkbox"/> PHI 151 Ethics   | <input type="checkbox"/> MEA 100 Medical Law and Ethics                                     |
|   | <input type="checkbox"/> CHD 120 Professional Ethics in Counseling the Chemically Dependent |

### Global Awareness . . . . . 3-4

Choose **one** course from the following list:

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> ANT 102 Cultural Anthropology    | <input type="checkbox"/> ENG 236 American Literature. II         | <input type="checkbox"/> HUM 250 Intro. to Cinema        |
| <input type="checkbox"/> ART 130 Survey of World Art I    | <input type="checkbox"/> FRE 101 Elementary French I             | <input type="checkbox"/> MUS 101 App. & Lit. of Music    |
| <input type="checkbox"/> ART 230 Survey of World Art II   | <input type="checkbox"/> GHY 240 World Regional Geography        | <input type="checkbox"/> PHI 205 Comparative World Rel.  |
| <input type="checkbox"/> ASL 101 American Sign Language I | <input type="checkbox"/> HIS 131 History of the United States I  | <input type="checkbox"/> POS 120 American National Gov.  |
| <input type="checkbox"/> BUS 206 Micro Economics          | <input type="checkbox"/> HIS 132 History of the United States II | <input type="checkbox"/> PSY101 Introductory Psychology  |
| <input type="checkbox"/> BUS 207 Macro Economics          | <input type="checkbox"/> HIS 135 Western Civilization I          | <input type="checkbox"/> SOC 131 Intro. to Sociology     |
| <input type="checkbox"/> ENG 137 Intro. to Literature     | <input type="checkbox"/> HIS 136 Western Civilization II         | <input type="checkbox"/> SOC 136 Marriage and Family     |
| <input type="checkbox"/> ENG 233 English Literature I     | <input type="checkbox"/> HIS 137 20th Century World History      | <input type="checkbox"/> SOC 140 Racial, Ethnic & Gender |
| <input type="checkbox"/> ENG 234 English Literature II    | <input type="checkbox"/> HUM 150 Introduction to Humanities I    | <input type="checkbox"/> SPA 101 Elementary Spanish I    |
| <input type="checkbox"/> ENG 235 American Literature I    | <input type="checkbox"/> HUM 151 Introduction to Humanities II   |  |

### Technology . . . . . 3

Choose **one** course from the following list:

- CIS 110 or higher
- an integrated academic or vocational course

## TOTAL AAS GENERAL EDUCATION CREDIT HOURS . . . . . 15-17

## Programs of Study



### Administration of Justice

#### -Associate of Arts Degree (AA)

The Associate of Arts in Administration of Justice prepares students for employment in the area of judicial studies, law enforcement and corrections. This program provides for professional growth and preparation for continuing education, career promotions and transfers.

#### General Education Credits . . . . . 35-37

See the General Education Core Requirements (AGEC-A) section of this catalog for details.

#### Special Requirements for the AGECA:

- PHI 101 Intro to Philosophy . . . . . (3)
- PSY 101 Intro to Psychology . . . . . (3)
- SOC 131 Intro to Sociology . . . . . (3)

#### AJS Requirements

- AJS 101 Intro to Admin. of Justice . . . . . 3
- AJS 109 Substantive Criminal Law . . . . . 3
- AJS 212 Juvenile Justice Procedures . . . . . 3
- AJS 230 The Police Function . . . . . 3
- AJS 240 The Correction Function . . . . . 3
- AJS 260 Procedural Criminal Law . . . . . 3
- AJS 275 Criminal Investigation . . . . . 3

**Total AJS Requirements . . . . . 21**

#### Elective Options

After consulting with an advisor, choose 9 credits from the following, excluding courses already taken for the AGECA.

- AJS 225 Criminology . . . . . 3
- AJS 245 Ethics in Criminal Justice . . . . . 3
- AJS 270 Community Policing . . . . . 3
- PSY 234 Social Psychology . . . . . 3
- PSY 270 Abnormal Psychology . . . . . 3
- SOC 133 Soc. of Deviant Behavior . . . . . 3
- SOC 140 Racial, Ethnic and Gender Relations . . . . . 3

**Elective Credits . . . . . 9**

**Total Degree Credits . . . . . 65-67**

### Corrections Officer - Certificate

The Corrections Officer Certificate Program prepares students for employment as corrections officers. For those already employed in corrections, or any other criminal justice system job, the program provides an opportunity for professional growth and preparation for career promotions and/or transfers.

#### Certificate Requirements

- AJS 101 Introduction to Administration of Justice . . . . . 3
- AJS 240 The Correction Function . . . . . 3
- AJS 260 Procedural Criminal Law . . . . . 3
- AJS 225 Criminology . . . . . 3
- AJS 245 Ethics and Administration of Justice . . . . . 3
- SOC 140 Racial, Ethnic and Gender Relations . . . . . 3

**Total Certificate Credits . . . . . 18**

Students who have successfully completed the Arizona Department of Corrections Correctional Officer Training Academy (COTA), which has a 280 hour curriculum, would be eligible for awarded credits for the following courses: AJS 101, AJS 240, and AJS 245.

## Automotive

### Automotive Collision Repair Technology

#### - Associate of Applied Science

The Associate of Applied Science degree in Automotive Collision Repair Technology provides the necessary skills in the areas of basic mechanics, metal working, welding metal and plastics, damage analysis and structural repair, and preparation for painting repaired automobiles as well as in the areas of communication, technical writing and mathematics.

Automotive collision repair technicians are hired by automobile dealerships and independent auto body repair shops. As an experienced technician, the student may also choose to open a business, work as an insurance adjuster, or become a factory representative for industry suppliers.

#### Spring - Year One

- ACT 110 Safety in Collision Repair . . . . . 2
- ACT 111 Metal Welding and Cutting I . . . . . 3
- ACT 121 Non Structural Repair Preparation . . . . . 3
- ACT 123 Metal Finishing and Body Filling . . . . . 3
- ACT 141 Refinish Safety . . . . . 1
- ACT 142 Surface Preparation I . . . . . 2
- ACT 143 Spray Equipment Operation . . . . . 2

**Spring Credits Year One . . . . . 16**

#### Fall - Year One

- ACT 150 Panel Repairs and Replacements . . . . . 3
- ACT 151 Structural Damage Diagnosis . . . . . 3
- ACT 152 Structural Damage Repair . . . . . 3
- ACT 153 Refinishing I . . . . . 2
- ACT 160 Fixed Glass, Plastics and Adhesives . . . . . 2

\*Critical Thinking & Reasoning Course .3-4

**Fall Credits Year One . . . . . 16-17**

**Spring - Year Two**

ACT 205 Estimating and Shop Management. . . . .3  
 ACT 211 MIG Welding and Cutting II . . .2  
 ACT 231 Advanced Structural Damage Diagnosis & Repair. .3  
 ACT 237 Automotive Collision Tech Lab 3  
 ACT 241 Paint Defects-Causes and Cures . . . . .3  
 \*Communications Course. . . . .3  
**Spring Credits Year Two. . . . . 17**

**Fall - Year Two**

ACT 242 Surface Preparation II . . . . .2  
 ACT 243 Refinishing II. . . . .2  
 ACT 244 Final Detail . . . . .2  
 \*Communications Course. . . . .3  
 \*Global Awareness Course . . . . .3  
 \*Technology Course . . . . .3  
**Fall Credits Year Two . . . . . 15**

*\*Choose from AAS General Education Checklist.*

Although these General Education courses are listed as part of the second, third and fourth semesters, it is highly encouraged that students take the second semester "Critical Thinking" and one of the "Communication" courses during the summer semester.

**Total Degree Credits . . . . . 64-65**

**Automotive Service Technology**

**- Associate of General Studies**

Students completing this two-year program will receive an Associate of General Studies degree and will be prepared to test for ASE (Automotive Service Excellence) certification in eight specific areas.

**Fall - Year One**

ASE 101 Workplace Skills Training . . . .1  
 ASE 102 Introductory Automotive Technology . . . . .2  
 ASE 111 Electrical/Electronic Systems I. .2  
 ASE 112 Electrical/Electronic Systems II .3  
 ASE 113 Electrical/Electronic Systems III .2  
 ASE 131 Automotive Refrig. Theory . . . .2  
 ASE 132 Automotive HVAC Systems . . .3  
**Fall Credits Year One . . . . . 15**

**Spring - Year One**

ASE 141 Automotive Engines I . . . . .3  
 ASE 142 Automotive Engines II . . . . .4

ASE 151 Automotive Ignition Systems. .2  
 ASE 152 Intake and Exhaust Systems . .2  
 ASE 153 Fuel Delivery Systems I . . . .2  
 ASE 154 Fuel Delivery Systems II . . . .2  
 BUS 105 Business English . . . . .3  
**Spring Credits Year One . . . . . 18**

**Fall - Year Two**

ASE 255 Emission Control Systems . . .1  
 ASE 256 On-board Diagnostic Systems .2  
 ASE 257 Automotive Ignition Systems. .2  
 ASE 260 Manual Transmission Systems .2  
 ASE 261 Automotive Drive Axles and Differentials . . . . .2  
 ASE 262 NVH Theory/Diagnostic Strategy . . . . .1  
 ASE 271 Auto Transmission Systems I . .3  
 ASE 272 Auto Transmission Systems II. .2  
**Fall Credits Year Two . . . . . 15**

**Spring - Year Two**

ASE 273 Four Wheel/All-Wheel Drive Systems . . . . .1  
 ASE 281 Brake Systems I . . . . .3  
 ASE 282 Brake Systems II . . . . .3  
 ASE 291 Suspension and Steering I . . .3  
 ASE 292 Suspension and Steering II. . .3  
**Spring Credits Year Two. . . . . 13**

**Total Degree Credits . . . . . 61**

**Business**

**Accounting**

**- Associate of Applied Science**

The Associate of Applied Science Degree in Accounting provides students with skills in accounting procedures and practices, finance and computer technologies. Teamwork, leadership, problem-solving skills and effective business communications will be emphasized throughout the program. Graduates will be prepared for entry-level employment in accounting, bookkeeping, tax preparation, payroll and office management.

**General Education Requirements**

from the General Education AAS Checklist  
 BUE 105 Business English . . . . .3  
**OR**  
 ENG 101 English Composition 1. . . . .3  
 BUE 110 Business Math . . . . .3  
 BUS 204 Business Communications. . .3

BUS 206 Micro Economics . . . . .3  
 CIS 131 Microsoft Office Suite . . . . .  
 Technology . . . . .3  
 General Education Credits . . . . . 15

**Accounting Requirements**

ACC 125 Introduction to Accounting Using QuickBooks. . . . .4  
 ACC 135 Accounting Systems and Procedures . . . . .3  
 ACC 139 Income Tax Accounting . . . .3  
 ACC 143 Payroll Tax Accounting. . . . .3  
 ACC 155 Cost Accounting. . . . .3  
 ACC 225 Intermediate Accounting I. . .3  
 ACC 230 Intermediate Accounting II. . .3  
 ACC 250 Non-Profit and Governmental Accounting. . .3  
 BUS 221 Financial Accounting . . . . .3  
 BUS 222 Managerial Accounting . . . .3  
**Total Accounting Credits . . . . . 31**

**Business Requirements**

BUE 101 Introduction to Business & Entrepreneurship. . . . .3  
 BUE 130 Financial Management for Entrepreneurs . . . . .3  
 BUS 202 Legal Environment of Business. . . . .3  
 BUS 207 Macro Economics . . . . .3  
**Business Credits . . . . . 12**

**Additional CIS Requirements**

CIS 135 Microsoft Access Database . .3  
 CIS 136 Microsoft Excel Spreadsheets .3  
**Total Additional CIS credits. . . . . 6**

**Total Degree Credits . . . . . 64**

**Business and Entrepreneurship**

**- Associate of Applied Science**

This degree in Business and Entrepreneurship is designed to prepare students for the business challenges of the future by providing them with a broad understanding of business principles. It also prepares students for a career as a small business owner, and emphasizes the skills and behavior patterns necessary to contribute to business success. The program content includes major subject areas of business such as entrepreneurship, accounting, economics, human resources, marketing, organizational and small business management, and business law. Additional skill sets such as effective oral

## Programs of Study

and written communication, ethics and computer proficiency are also emphasized. The program is intended for individuals who plan to use their studies for immediate employment, enhanced job performance, career advancement, or for starting and owning their own business.

### General Education Requirements

from the General Education AAS Checklist  
BUE 105 Business English . . . . . 3

#### OR

ENG 101 English Composition 1 . . . . . 3  
BUE 110 Business Math . . . . . 3  
BUS 204 Business Communications . . . 3  
BUS 206 Micro Economics . . . . . 3  
CIS 131 Microsoft Office Suite . . . . . 3  
**Total General Education Credits . . . . . 15**

### ACC: Accounting Requirements

ACC 125 Introduction to Accounting . . .  
Using QuickBooks. . . . . 4  
ACC 143 Payroll Procedures. . . . . 3  
**Total ACC Credits. . . . . 7**

### BUE: Business & Entrepreneurship Requirements

BUE 101 Intro to Business & Entrepreneurship. . . . . 3  
BUE 102 Human Behavior in the Workplace. . . . . 3  
BUE 120 Managing & Supervising Techniques . . . . . 3  
BUE 130 Financial Management for Entrepreneurs . . . . . 3  
BUE 175 Business Ethics. . . . . 3  
BUE 250 Entrepreneurial Management . 3  
BUE 260 Global Management. . . . . 3  
BUE 275 Effective Leadership for Entrepreneurs . . . . . 3  
**Total BUE Credits. . . . . 24**

### BUS: Business Requirements

BUS 161 Marketing . . . . . 3  
BUS 165 Retailing & Customer Service . 3  
BUS 202 Legal Environment of Business 3  
BUS 207 Macro Economics . . . . . 3  
BUS 247 Human Resource Management. . . . . 3  
**Total BUS Credits. . . . . 15**

### CIS: Computer Information Systems Requirements

CIS 136 Excel Spreadsheets. . . . . 3

**Total Degree Credits . . . . . 64**

## Business and Entrepreneurship

### - Certificate

This certificate is designed to provide students with the basic knowledge necessary to think like entrepreneurs in recognizing new business opportunities. It integrates functional areas of entrepreneurship such as start-up procedures including idea generation and business plan preparation with an overview of marketing, financing and accounting principles.

### Certificate Requirements

ACC 125 Introduction to Accounting Using QuickBooks. . . . . 4  
BUE 101 Intro to Business & Entrepreneurship. . . . . 3  
BUE 130 Financial Management for Entrepreneurs . . . . . 3  
BUE 250 Entrepreneurial Management . 3  
BUS 161 Marketing . . . . . 3  
**Total Certificate Credits . . . . . 16**

## Business

## Bookkeeping

### - Certificate

This certificate is designed to help people obtain immediate jobs as bookkeepers by providing them with the skills to work with general ledger, receivables, payables, payroll and accounting systems. After completing this certificate and the requisite work experience, students may consider sitting for the national Professional Bookkeepers exam. For more information on this exam, please visit [www.aipb.org](http://www.aipb.org)

### Certificate Requirements

ACC 125 Introduction to Accounting Using QuickBooks. . . . . 4  
ACC 135 Accounting Systems and Procedures. . . . . 3  
ACC 139 Income Tax Accounting . . . . 3  
**OR**  
ACC 143 Payroll Procedures. . . . . 3  
BUE 110 Business Math . . . . . 3  
CIS 131 Microsoft Office Suite . . . . . 3  
CIS 136 Microsoft Excel . . . . . 3

**Total Certificate Credits . . . . . 19**

## Business

## Supervisor

### - Certificate

This certificate will prepare the student for a career as a supervisor. Topics will include safe work habits, the understanding of effective communication, human interaction and supervision. The student will achieve organizational goals and increase human resource productivity while maintaining compliance with various laws and regulations.

### Certificate Requirements

BTR 105 Basic Trades Safety. . . . . 3  
BUE 101 Intro to Business & Entrepreneurship. . . . . 3  
BUE 102 Human Behavior in the Workplace. . . . . 3  
BUE 120 Managing & Supervising . . . .  
Techniques . . . . . 3  
BUS 247 Human Resource Management 3  
*Choose one elective course from  
BUS, CIS, or any trades prefix . . . . . 1-3*

**Total Certificate Credits . . . . . 16-18**

## Business

## Business Administration

### Associate of Business (A-Bus)

The Associate of Business is designed especially for the student who plans to transfer to a university.

### General Education Credits . . . 35-37

See the General Education Core Requirements (AGEC-B) section of this catalog for details.

### Business Requirements

Excluding courses already taken for the AGECE.

BUS 202 Legal Environment of Business 3  
BUS 206 Micro Economics . . . . . 3  
BUS 207 Macro Economics . . . . . 3  
BUS 208 Business Statistics . . . . . 3  
BUS 221 Financial Accounting . . . . . 3  
BUS 222 Managerial Accounting . . . . 3  
CIS 110 Introduction to Computer Information Systems . . . . . 3  
MAT 201 Finite Mathematics . . . . . 3  
**Total Business Requirements . . . . . 24**

**Content Area Requirements**

Choose 3-4 credits from the following:

- ACC 125 Introduction to Accounting using QuickBooks . . . . .4
- BUS 204 Business Communications . . .3
- CIS 120 Intro. to Programming . . . .3
- Total Content Area Requirements. . . .3-4**

**Total Degree Credits . . . . . 62-65**

## Child Development Associate

### Child Development Associate Pathway

The Child Development Associate pathway is designed to meet the educational needs of people already working in the field of early childhood education including Head Start assistants and other childcare workers who want to learn the basic principles of early childhood education. This program provides the opportunity for students to meet the requirements for the national Child Development Associate (CDA) credential awarded by the Council for Early Childhood Professional Recognition. The CDA credential is not issued by Mohave Community College and must be applied for and paid for separately from this program. Courses have been included with a focus on developing an educational career pathway.

**Course Requirements**

- CDA 101A Safety, Health and Nutrition .1
- CDA 101B A Learning Environment in Early Childhood. . . . .1
- CDA 101C Principles of Child Development & Curriculum .1
- CDA 102A Physical Development . . . .1
- CDA 102B Intellectual Development . . .1
- CDA 102C Social, Emotional and Self-Concept Development .1
- CDA 103A Observation, Behavior and Guidance . . . . .1
- CDA 103B Understanding Families and Communities . . . . .1
- CDA 103C Program Operation and Professionalism . . . . .1

**Total Credits . . . . .9**



## Chemical Dependency Studies

**- Associate of Applied Science**

This degree program is designed to prepare students as paraprofessionals in the field chemical dependency treatment. With coursework in abuse, dependence, addiction, pharmacology, ethics, documentation and interviewing, treatment philosophies, family systems and relapse prevention, this program culminates with a 240-hour internship where students apply their knowledge in a guided field experience. The AAS in Chemical Dependency Studies can also afford many options for employment in any field requiring knowledge of substance abuse such psychology, social work, criminal justice or any occupational field in which one works with people.

With this coursework, students will earn an AAS in Chemical Dependency Studies and complete the educational requirements necessary to apply for licensure as a Substance Abuse Technician (LSAT) through the Arizona Board of Behavioral Health Examiners (AzBBHE).

**Important Program Notes:**

- CHD 100 is a prerequisite for all other CHD courses, along with PSY 101,

SOC 131, CIS 110 (or CIS 131), and ENG 101.

- Classes are not offered each semester.
- Students must achieve a minimum grade of 2.0 in each required course.
- Fingerprint Clearance Card is REQUIRED for field placement.
- Coursework is highly interactive and includes community-based activities.
- AAS in Chemical Dependency Studies emphasizes job skills for entry-level employment in substance abuse treatment.

**Criteria for Internships**

While a student may be academically prepared for this field experience, agencies may reject a candidate at the application interview for reasons they deem appropriate and for which they have determined would make the student inappropriate for placement in their agencies. Field supervisors may also terminate a student's field experience at any time during the Internship if it is determined the student is resistant to supervision or non-compliant, or for any other reason the agency identifies in which the student poses a threat to client welfare.

- Students are required to have a Fingerprint Clearance Card prior to enrollment in the CHD 280 course (Chemical Dependency Practicum).
- Registration in CHD 280 is subject to the number of internships available each semester.

## Programs of Study

- Transportation related to internship placement is the responsibility of the student.
- Students are required to follow the placement agencies policies during their field experience
- Students are required to absorb any costs involved in obtaining placement (I.E.: fingerprint clearance card, criminal background check, urine analysis, etc.)

### Fall - Year 1 Prerequisites

CHD 100	Foundations of Chemical Dependency . . . . .	.3
ENG 101	English Composition I . . . . .	.3
CIS 110	Introduction to Computer Information Systems . . . . .	.3

**OR**

CIS 131	Microsoft Office Suite . . . . .	.3
PSY 101	Introductory Psychology . . . . .	.3
SOC 131	Introduction to Sociology . . . . .	.3

**Prerequisite Total Credits . . . . . 15**

### Spring - Year One

CHD 102	Communication Skills in Chemical Dependency . . . . .	.3
CHD 110	Biological Systems Pharmacology of the Chemically Dependent . . . . .	.3
CHD 120	Professional Ethics in Counseling the Chemically Dependent . . . . .	.2
CHD 150	Principles of Self-Help Groups . . . . .	.2
CHD 161	Beginning Interviewing & Documentation Skills . . . . .	.3
ENG 102	English Composition II . . . . .	.3

**OR**

ENG 136	Report Writing . . . . .	.3
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**Spring Year One Total Credits . . . . . 16**

### Fall Year Two

CHD 165	Theory and Tech. in the Treatment of the Chemically Dependent . . . . .	.2
CHD 220	Family Dynamics and Chemical Dependency . . . . .	.3
CHD 226	Counseling Multicultural and Diverse Populations . . . . .	.3
CHD 236	Recovery and Relapse of the Chemically Dependent . . . . .	.2
CHD 245	Dual Diagnosis . . . . .	.2
COM 121	Interpersonal Communication . . . . .	.3

**Total Fall Year 2 Credit Hours . . . . . 15**

### Spring Year Two

CHD 250	Group Intervention with the
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	Chemically Dependent . . . . .	.3
CHD 275	Adv. Theory and Tech. in the Treatment of the Chem. Dep. . . . .	.3
CHD 280	Chemical Dependency Practicum . . . . .	.6
PSY 234	Social Psychology . . . . .	.3

**Total Spring Year Two Credits . . . . . 15**

**Total Degree Credits . . . . . 61**

## Computer Information Systems

### Systems Administration - Associate of Applied Science

The Associate of Applied Sciences (AAS) degree in CIS Systems Administration can be used as a transfer block to Northern Arizona University for completion toward a BAS degree in Technology Management. This AAS also includes the Associate of Arts General Education Core (AGEC-A) requirements.

**Note:** Students may complete their degree with NAU through online classes. (NAU's Cultural Understanding requirements will be completed after transfer)

### General Education Special Requirements from the General Education AAS Checklist

#### Communication

ENG 101 and ENG 102 . . . . .	.6
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#### Critical Thinking and Reasoning

MAT 142 College Mathematics . . . . .	.3
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#### Global Awareness

*Choose two Humanities*

PHI 205 (satisfies 3 credits of NAU's Global Diversity Awareness . . . . .)	.3
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*Choose one other course from AGECE-A*

*Section C with a different prefix (not PHI)*

SOC 140 (satisfies 3 credits of NAU's Ethnic Diversity Awareness) . . . . .	.3
BUS 206 Micro Economics . . . . .	.3
BUS 207 Macro Economics . . . . .	.3

#### Technology

CIS 110 Introduction to CIS . . . . .	.3
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#### Science

*Choose two courses from Section E In the AGECE-A . . . . .*

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**Total General Ed Requirements . . . . . 35**

### Program Requirements

CIS 115	Microcomputer Repair I . . . . .	.3
CIS 116	Microcomputer Repair II . . . . .	.3
CIS 120	Introduction to Programming . . . . .	.3
CIS 143	Introduction to Web Page Design . . . . .	.3
CIS 153	Networking Essentials . . . . .	.3
CIS 210	Database Management . . . . .	.3
CIS 253	Network Security . . . . .	.3
CIS 270	Systems Analysis and Design . . . . .	.3

*Choose 6 credits of the following:*

CIS 204	Programming &Game Development in C++ . . . . .	.3
CIS 206	Programming for the Web with JavaScript . . . . .	.3
CIS 208	Programming in C# . . . . .	.3

**Total Program Requirements . . . . . 30**

**Total Degree Credits . . . . . 65**

## Computer Graphics and Web Design

### - Associate of Applied Science

This degree will prepare students to design and develop Web sites and use graphic software for publications and professional digital imaging. While many courses are offered in a traditional classroom setting, this degree may also be obtained by taking all of your coursework online.

### Degree Requirements

BUE 105	Business English . . . . .	(3)
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**OR**

ENG 101	English Composition I . . . . .	.3
BUS 204	Business Communication . . . . .	.3
BUE 110	Business Math . . . . .	.3
CIS 110	Intro to Computer Information Systems . . . . .	.3

CIS 153	Network Essentials . . . . .	.3
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BUS 206	Micro Economics . . . . .	(3)
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**OR**

BUS 207	Macro Economics . . . . .	.3
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BUS 161	Marketing . . . . .	.3
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**Total Foundation Credits . . . . . 21**

### Degree Emphasis Courses

CIS 131	MS Office . . . . .	.3
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CIS 140	InDesign Desktop Publishing . . . . .	.3
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CIS 143	Web Page Design I . . . . .	.3
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CIS 145	Photoshop I . . . . .	.3
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CIS 241	E-Commerce Technology . . . . .	.3
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ART 130 Survey of World Art I . . . . .3  
 ART 230 Survey of World Art II . . . . .3  
 BUE 101 Introduction to Business . . . . .3  
 BUE 121 Customer Service . . . . .3  
 BUE 175 Business Ethics. . . . .3  
**Total Degree Emphasis Credits . . . . . 30**

**Capstone Courses**

CIS 243 Web Page Design II. . . . .3  
 CIS 245 Photoshop II . . . . .3  
 CIS 280 Internship. . . . .3  
**Total Capstone Credits . . . . .9**

**Total Degree Credits . . . . . 60**

**Network Support and Information Security**

**- Associate of Applied Science**

This Associate of Applied Science degree program is intended for students who plan work in technology support services. The course work emphasizes computer repair, network troubleshooting, information security and helpdesk support.

**Degree Requirements**

BUE 105 Business English . . . . .3

**OR**

ENG 101 English Composition I . . . . .3  
 BUS 204 Business Communications. . . . .3  
 BUS 206 Micro Economics . . . . .3

**OR**

BUS 207 Macro Economics . . . . .3  
 BUE 110 Business Math . . . . .3  
 CIS 110 Introduction to Computer . . . . .3  
     Information Systems . . . . .3  
 CIS 120 Introduction to Programming .3  
 CIS 153 Networking Essentials . . . . .3  
**Total Foundation Credits . . . . . 21**

**Degree emphasis courses**

CIS 115 Computer Repair I. . . . .3  
 CIS 116 Computer Repair II . . . . .3  
 CIS 135 MS Access. . . . .3  
 CIS 136 MS Excel. . . . .3  
 CIS 138 MS Word . . . . .3  
 CIS 141 MS PowerPoint . . . . .3  
 CIS 143 Web Page Design I. . . . .3  
 CIS 156 Firewalls and Intrusion  
     Detection . . . . .3  
 CIS 253 Network Security . . . . .3  
 CIS 261 Computer Support Services .3  
**Total Degree Emphasis credits . . . . . 30**

**Capstone Courses**

CIS 210 Database Management  
     & SQL Design . . . . .3

CIS 270 Systems Analysis & Design . .3  
 CIS 280 Internship . . . . .3  
**Total Capstone Credits . . . . .9**

**Total Degree Credits . . . . . 60**

**Computer Graphics and Web Design**

**- Certificate**

The Computer Graphics and Web Design Certificate prepares students for positions in business and industry, or positions that require enhanced knowledge of computer graphics, desktop publishing and Web page design. All courses satisfactorily completed in this certificate program will apply to the Associate of Applied Science degree in Computer Information Systems.

**Certificate Requirements**

CIS 110 Intro to Computer  
     Information Systems . . . . .3  
 CIS 140 InDesign Desktop Publishing .3  
 CIS 143 Web Page Design I. . . . .3  
 CIS 145 Photoshop I . . . . .3

**Certificate Credits . . . . . 15**

**Elective Requirements**

*Choose 6 credits from the following*

CIS 206 Programming for  
     Web with JavaScript . . . . .3  
 CIS 241 E-Commerce Technology . . .3  
 CIS 243 Web Page Design II . . . . .3  
 CIS 245 Photoshop II. . . . .3

**Elective Credits . . . . .6**

**Total Certificate Credits . . . . . 18**

**Systems Support and Security**

**- Certificate**

The Systems Support and Security certificate provides students with the skills needed to function as technical and network support for an organization. General network troubleshooting and computer repair procedures will be covered along with basic security protocols.

**Certificate Requirements**

CIS 110 Introduction to Computer

Information Systems . . . . .3  
 CIS 115 Computer Repair I . . . . .3  
 CIS 116 Computer Repair II . . . . .3  
 CIS 153 Networking . . . . .3  
 CIS 253 Network Security . . . . .3  
**Certificate Credits . . . . . 15**

**Elective Requirements**

*Choose one course from the following . . . .*

CIS 131 MS Office . . . . .3  
 CIS 156 Firewalls and  
     Intrusion Detection . . . . .3  
 CIS 261 Computer Support Services .3  
**Elective Credits . . . . .3**

**Total Certificate Credits . . . . . 18**

**Professional Applications**

**- Certificate**

The Professional Applications Certificate provides students a working knowledge of a variety of software programs used in business today. All courses satisfactorily completed in this certificate program will apply to the Associate of Applied Science degree in Business Administration or Computer Information Systems.

**Certificate Requirements**

*Choose 5 courses or 15 credits in any combination from the following:*

CIS 135 Microsoft Access Database . .3  
 CIS 136 Microsoft Excel . . . . .3  
 CIS 138 Microsoft Word . . . . .3  
 CIS 140 InDesign Desktop Publishing .3  
 CIS 141 Microsoft PowerPoint  
     Presentations . . . . .3  
 CIS 143 Web Page Design I. . . . .3  
 CIS 145 Photoshop I . . . . .3  
 CIS 243 Web Page Design II . . . . .3

**Requirement Credits . . . . . 15**

**Elective Options**

*Choose any CIS 100 or above course as an elective.*

**Elective Credits . . . . .3**

**Total Certificate Credits . . . . . 18**

## Programs of Study

### Programming and Game Development

#### – Certificate

The Programming and Game Development Certificate prepares students to work as part of a programming and/or game application development team. Skills in the most commonly used programming languages will be developed and students will gain practice in systems theory, logic and design common to all programming languages. All courses successfully completed in this certificate program can apply to the Associate of Applied Science Degree in Computer Information Systems.

#### Program Requirements

CIS 110	Intro to Computer Information Systems . . . . .	.3
CIS 120	Introduction to Programming . . . . .	.3
<i>Choose 4 courses from the following:</i>		
CIS 125	Basic Game Design and Creation. . . . .	.3
CIS 200	Programming & Game Design in Visual Basic.NET . . . . .	.3
CIS 204	Programming & Game Design in C++. . . . .	.3
CIS 206	Programming for the Web in JavaScript . . . . .	.3
CIS 208	Programming in C# . . . . .	.3
CIS 243	Web Page Design II . . . . .	.3

**Total Certificate Credits . . . . . 18**

### Computer Information Systems

#### - Associate of Business - SR

This degree prepares students to transfer to an Arizona university to pursue a bachelor's degree in Computer Information Systems or Management Information Systems. The program requirements differ between universities and the official transfer guide located at [www.AZTransfer.com](http://www.AZTransfer.com). An advisor should be consulted in order to include any additional requirements of each university.

#### General Education Credits . . . 35-37

See the General Education Core Requirements section (AGEC-B) of this catalog for details.

#### Special Requirements for the AGECEC-B

BUS 206	Microeconomics . . . . .	(3)
BUS 207	Macroeconomic . . . . .	(3)

#### Additional Requirements (U of A only)

After consulting with an advisor, choose a 4 credit-hour language (not English) course from the transferable course chart.

#### Quantitative Methods

Consult an advisor or see the Business Major Guide located on [www.AZTransfer.com](http://www.AZTransfer.com) for university specific quantitative requirements.

(NAU or U of A only)

MAT 201	Finite Mathematics . . . . .	.3
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#### OR

(ASU – only)

MAT 231	Analytic Geometry & Calculus II. . . . .	.4
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**Quantitative Methods Requirements . . .3-4**

#### Degree Requirements

ACC 125	Introduction to Accounting Using QuickBooks. . . . .	.4
BUS 202	Legal Environment of Business . . . . .	.3
BUS 221	Financial Accounting . . . . .	.3
BUS 222	Managerial Accounting . . . . .	.3
CIS 120	Introduction to Programming . . . . .	.3
CIS 208	Programming in C# . . . . .	.3
CIS 270	Systems Analysis and Design . . . . .	.3
BUS 208	Business Statistics . . . . .	.3
<b>Total Degree Requirements. . . . .</b>		<b>25</b>

**Total Degree Credits . . . . . 63-66**

## Culinary Arts and Hospitality

### Culinary Arts and Hospitality

#### - Associate of Applied Science

The Culinary Arts and Hospitality program offers a strong balance between the technical hands-on training in culinary techniques, the theoretical training, and the general education core values required to succeed in food service and hospitality management. The courses are offered on a year-round basis.

#### General Education Special Requirements

ENG 101	English Composition I . . . . .	.3
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#### OR

GBS 105	Business English . . . . .	.3
COM 151	Public Speaking . . . . .	.3

GBS 175	Business Ethics. . . . .	.3
PSY 101	Introductory Psychology. . . . .	.3
CIS 110	Introduction to Computer Information Systems . . . . .	.3

#### OR

CIS 131	Microsoft Office Suite. . . . .	.3
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**Total General Education Credits . . . 15-17**

#### Program Requirements

CUL 111	Introduction to Culinary . . . . .	.4
CUL 112	Techniques of Healthy Cooking . . . . .	.4
CUL 113	Saucier . . . . .	.4
CUL 114	Baking. . . . .	.4
CUL 115	Sanitation and Safety . . . . .	.3
CUL 116	Supervisory Management . . . . .	.3
CUL 117	Purchasing and Receiving . . . . .	.3
CUL 118	Hospitality and Culinary Marketing . . . . .	.3
CUL 119	Externship . . . . .	.3
CUL 211	Food and Beverage . . . . .	.3
	Cost Control . . . . .	.3
CUL 212	American Regional Cuisine . . . . .	.4
CUL 213	International Cuisine. . . . .	.4
CUL 214	Hospitality and Culinary Law . . . . .	.3

**Total Program Requirements . . . . . 45**

**Total Degree Credits . . . . . 60-62**

### Baking and Pastry

#### -Certificate

CUL 111	Introduction to Culinary . . . . .	.4
CUL 112	Techniques of Healthy Cooking . . . . .	.4
CUL 114	Baking. . . . .	.4
CUL 115	Sanitation & Safety. . . . .	.3
CUL 116	Supervisory Management . . . . .	.3
CUL 215	Artisan Breads . . . . .	.4
CUL 216	Advanced Baking & Pastry . . . . .	.4
CUL 217	Chocolate, Confections, Sugar . . . . .	.4

**Total Certificate Credits . . . . . 30**

### Culinary Arts and Hospitality

#### - Certificate

The Culinary Arts and Hospitality program offers a strong balance between the technical hands-on training in culinary techniques and the theoretical training required to succeed in food service and hospitality management.

#### Certificate Requirements

CUL 111	Introduction to Culinary . . . . .	.4
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CUL 112 Techniques of Healthy Cooking 4  
 CUL 113 Saucier . . . . . 4  
 CUL 114 Baking. . . . . 4  
 CUL 115 Sanitation and Safety . . . . . 3  
 CUL 116 Supervisory Management . . . 3  
 CUL 117 Purchasing & Receiving . . . 3  
 CUL 118 Hospitality &  
 Culinary Marketing . . . . . 3  
 CUL 119 Externship . . . . . 3  
 CUL 211 Food and Beverage  
 Cost Control . . . . . 3  
 CUL 212 American Regional Cuisine . . 4  
 CUL 213 International Cuisine. . . . . 4  
 CUL 214 Hospitality and Culinary Law . 3

**Total Certificate Credits . . . . . 45**

## Dental Programs

### Dental Hygiene

#### - Associate of Applied Science

The Dental Hygiene Program is designed to equip the student with the knowledge and skills necessary to take the national and state licensing examinations for Dental Hygiene. Students must adhere to the prescribed program if they are to complete the program and become eligible to take the exams.

This program is designed for a student to become a dental hygienist in a two-year period (after completion of general education requirements) at Mohave Community College. The dental hygiene courses may not transfer to another two or four-year college.

All General Education coursework must be completed prior to beginning Dental Hygiene classes, with a grade point average of 2.8 or above and a grade of "C" or higher in all courses. Science courses must have been taken within the last 10 years.

Students must complete an application specific to the Dental Hygiene Program and have their acceptance into the program confirmed prior to enrolling in any dental hygiene coursework. Program information and application procedures are posted on the Dental Hygiene Web pages on the

MCC Web site at [www.mohave.edu](http://www.mohave.edu). The program accepts 18 students each fall. The application deadline is March 1.

#### Admission Prerequisites

The Dental Hygiene program at MCC is highly selective. Students wishing to apply for admission to the Dental Hygiene Program must complete the following courses prior to admission. Applicants may complete these courses during the spring semester in which they are applying to the program.

**General Education Special Requirements** from the General Education AAS Checklist and Prerequisites

ENG 101 English Composition I . . . . . 3  
 ENG 102 English Composition II. . . . . 3  
 BIO 201 Anatomy & Physiology I . . . . 4  
 BIO 202 Anatomy & Physiology II . . . 4  
 BIO 205 Microbiology . . . . . 4  
 CHM 130 Fundamental  
 Chemistry or higher . . . . . 4  
 PSY 101 Introductory Psychology. . . . 3  
 SOC131 Introduction to Sociology . . . 3  
 COM 121 Interpersonal  
 Communications . . . . . (3)  
**OR**  
 COM 151 Public Speaking . . . . . 3  
**OR**  
 Any (3) credit hours of communication . (3)  
**General Education Credits . . . . . 31**

#### Program Prerequisite

Students must maintain a valid American Heart Association Healthcare Provider CPR certification throughout the program.

#### Fall Year One

DEH 100 Current Issues & Ethics in D.H. 1  
 DEH 101 Preclinical Dental Hygiene . . 5  
 DEH 106 Dental Radiology . . . . . 3  
 DEH 121 Dental Anatomy . . . . . 3  
 DEH 122 Head & Neck Anatomy . . . . 2  
**Fall Year One Total Credits . . . . . 14**

#### Spring Year One

DEH 102 Clinic I. . . . . 6  
 DEH 111 Periodontology I. . . . . 3  
 DEH 117 Applied Pharmacology . . . . 3  
 DEH 118 Anesthesiology . . . . . 3  
**Spring Year One Total Credits. . . . . 15**

#### Summer Year One

DEH 201 Clinic II . . . . . 5

DEH 208 Dental Materials . . . . . 2  
**Summer Year One Total Credits. . . . . 7**

#### Fall Year Two

DEH 202 Clinic III . . . . . 9  
 DEH 212 Periodontology II . . . . . 2  
 DEH 223 General and Oral Pathology . 3  
**Fall Year Two Total Credits . . . . . 14**

#### Spring Year Two

DEH 203 Practice Management &  
 Dental Hygiene Clinic IV . . . . . 9  
 DEH 235 Oral Health Promotion &  
 Disease Prevention . . . . . 2  
 DEH 243 Community Dental Health. . . 3  
**Spring Year Two Total Credits . . . . . 14**

**Total Degree Credits . . . . . 89**

### Dental Assisting - Certificate

The Dental Assisting Program at MCC is comprised of lecture, lab and clinical components. Students will satisfy clinical and lab requirements in the Dental Hygiene Clinic and in private dental offices in their respective communities.

#### Prerequisites

Students must show appropriate abilities on the assessment test by either placing into ENG 101 and TRM 091 or by passing PCS 021, TRE 089 and TRM 090. Students must maintain a valid American Heart Association Healthcare Provider CPR certification throughout the program. Students must complete the Program Immunization and Health Declaration by the third week of the semester for any lab classes.

#### Certificate Requirements

##### Fall

DAE 107 Dental Assisting I . . . . . 2  
 DAE 101 Biomedical Dental Science . . 3  
 DAE 105 Dental Infection Control. . . . 1  
 DAE 106 Dental Assisting Radiography . 3  
 DAE 108 Dental Assisting II . . . . . 3  
**Fall Credits . . . . . 12**

##### Spring

DAE 109 Dental Assisting Materials . . 3  
 DAE 120 Dental Specialties . . . . . 3  
 DAE 114 Clinical Procedures . . . . . 7

# Programs of Study



DAE 115 Office Management for  
the Dental Assistant . . . . .1  
**Spring Credits** . . . . . 14  
**Total Certificate Credits** . . . . . 26

## Education

### Elementary Education - Associate of Arts

The Associate of Arts with an emphasis in Elementary Education program provides the foundation coursework for future teachers in elementary education. Students intending to transfer to a four-year baccalaureate program are urged to contact an advisor at the transfer institution for content area recommendations. For a list of partner institutions please consult the Transfer Options section of the MCC catalog.

**General Education Credits** . . . . . 35-37  
See the General Education Core Requirements (AGEC-A) section of this catalog for details.

**Special Requirements for the AGEC-A**  
POS 120 American National Gov. . . . .3  
EDU 214 Cultural Diversity . . . . .3  
**Total Special Requirements**. . . . .6

**Education Requirements**  
EDU 205 Introduction to Education . . .3  
EDU 222 The Exceptional Student . . .3  
**Total Education Credits**. . . . .6

**Other Requirements**  
MAT 160 Math for Elementary Teachers I 3  
MAT 161 Math for Elementary Teachers II . . . . .3  
POS 100 Arizona Constitution and Government. . . . .1  
**Total Other Requirements Credits** . . .7

**Elective Options**  
– Content Area Coursework  
After consulting with an advisor, choose 12 credits from the transferable course chart from one of the following content areas:  
Computer Science • Language Arts • Mathematics (Not MAT 121 or MAT 151) • Sciences • Social and Behavioral Sciences (May not use courses already taken for the AGEC)  
**Total Content Area Credits** . . . . . 12

**Total Degree Credits** . . . . . 63-65

### Elementary Education Emphasis in Early Childhood - Associate of Arts

The Associate of Arts degree with an emphasis in Early Childhood Education

provides the foundation coursework for future teachers in early childhood education or K-2 elementary education. Students intending to transfer to a four-year baccalaureate program are urged to contact an advisor at the intended school of transfer as soon as possible. Students intending to transfer to a state university in Arizona (NAU, ASU, or U of A) need to follow the Arizona General Education Curriculum (AGEC-A Checklist) which fulfills lower division, general education requirements at these universities.

**General Education Credits** . . . . . 35-37  
See the General Education Core Requirements (AGEC-A) section of this catalog for details.

**Special Requirements for the AGEC-A**  
POS 120 American National Gov.. . . (3)  
EDU 214 Cultural Diversity . . . . . (3)

**Other Requirements**  
MAT 160 Math for Elementary Teachers I . . . . .3  
MAT 161 Math for Elementary Teachers II . . . . .3  
POS 100 Arizona Constitution and Government. . . . .1

**Elective Options**  
After consulting with an advisor, choose three credits from the transferable course chart, excluding a course that has already been used in the AGEC or degree requirements section.  
**Elective Credits** . . . . .3  
**Other Requirements** . . . . . 10

**Early Childhood Education Core**  
EDU 205 Introduction to Education . . .3  
EDU 222 The Exceptional Student . . .3  
ECE 271 Curriculum & Experiences in Early Childhood. . . . .3  
ECE 272 Classroom Management . . .3  
ECE 273 Play Education. . . . .3  
ECE 274 Practicum . . . . .2  
Early Childhood Core Credits . . . . . 17

**Total Degree Credits** . . . . . 62-64

# Electrical Technology

## - Associate of Applied Science

Prepares graduates to enter the electrical field with skills in electrical theory, maintenance and installation necessary to be successful residential and industrial technicians. Topics of study will include residential and industrial electricity, power distribution systems, electric motors and controls, and low-voltage system installation and maintenance. Students will learn to work in teams and develop the appropriate communications skills necessary to be successful in the workplace. Workplace safety will be emphasized throughout the program of study.

### General Education Special Requirements from the General Education

**AAS Checklist. . . . . 15-17**

### Building Trades Requirements

BTR 100 Blueprint Reading . . . . . 3

BTR 105 Basic Trades Safety. . . . . 3

**Building Trades Credits . . . . . 6**

### Additional Requirements

GBS 101 Introduction to Business . . . . . 3

MGT 110 Supervisory Techniques . . . . . 3

MGT 120 Principles of Management . . . . . 3

GBS 121 Customer Service . . . . . 3

**Total Additional Requirements . . . . . 12**

### Program Requirements

ELC 110 Residential Wiring I . . . . . 3

ELC 111 Residential Wiring II . . . . . 3

ELC 112 Electrical Calculations . . . . . 2

ELC 115 AC/DC Theory . . . . . 3

ELC 120 NEC Codes for Residential. . . . . 3

ELC 210 Commercial/Industrial Electricity I. . . . . 3

ELC 211 Commercial/Industry II . . . . . 3

ELC 220 Electrical Motors & Controls. . . . . 3

ELC 200 Grounding & Bonding . . . . . 2

**OR**

ELC 205 Relay Control Systems . . . . . 3

ELC 221 Low Voltage Systems. . . . . 3

ELC 225 NEC Codes for Commercial . . . . . 3

**Total Program Credits. . . . . 31-32**

**Total Degree Credits . . . . . 64-67**

## Electrical Technology

### Electrician

#### - Certificate

Graduates of the Electrician Certificate are provided with the skills necessary to be successful as electricians in the workplace. Topics of study will include residential and industrial electricity, power distribution systems, electric motors and controls, and low-voltage system installation and maintenance. Students will be provided with opportunities to work in teams and develop appropriate communications skills necessary to be successful in the workplace. Workplace safety will be emphasized throughout the program of study.

#### Program Requirements

BTR 100 Blueprint Reading . . . . . 3

BTR 105 Basic Trades Safety. . . . . 3

ELC 110 Residential Wiring I . . . . . 3

ELC 111 Residential Wiring II . . . . . 3

ELC 112 Electrical Calculations. . . . . 2

ELC 115 AC/DC Theory . . . . . 3

ELC 120 NEC Codes for Residential. . . . . 3

ELC 210 Commercial/Industrial I. . . . . 3

ELC 211 Commercial/Industrial II. . . . . 3

ELC 200 Grounding & Bonding. . . . . 2

**OR**

ELC 205 Programmable Logic

Controllers. . . . . 3

ELC 220 Electrical Motors & Controls. . . . . 3

ELC 221 Low Voltage Systems. . . . . 3

ELC 225 NEC Codes for Commercial . . . . . 3

**Total Certificate Credits . . . . . 37-38**

## Electrical Technology

### Industrial Maintenance

#### - Certificate

Prepares graduates for employment in electrical installation and maintenance as required in an industrial setting, and is designed for individuals who have electrical workplace experience or who have completed the Residential Wiring Certificate. Students who have not previously completed an electrical program of study will be required to demonstrate their previous experience through certificates and/or letters of references from employers. Students will learn industrial troubleshooting and installation processes, the use of industrial motors and controls, as well as programmable logic controllers.

#### Certificate Requirements

ELC 115 AC/DC Theory . . . . . 3

ELC 210 Commercial/Industrial I . . . . . 3

ELC 211 Commercial/Industrial II . . . . . 3

ELC 200 Grounding & Bonding . . . . . (2)

**OR**

ELC 205 Relay Control Systems . . . . . 3

ELC 220 Electrical Motors & Controls. . . . . 3

**Total Certificate Credits . . . . . 14-15**

## Electrical Technology

### Residential Wiring

#### - Certificate

Prepares graduates for entry-level employment as a residential wiring installer. Graduates will learn the proper techniques for wiring residential applications, including the use of the NEC codebook for residential electrical installations.

#### Certificate Requirements

BTR 100 Blueprint Reading . . . . . 3

ELC 110 Residential Wiring I . . . . . 3

ELC 111 Residential Wiring II . . . . . 3

ELC 112 Electrical Calculations . . . . . 2

ELC 115 AC/DC Theory . . . . . 3

ELC 120 NEC Codes for Residential. . . . . 3

**Total Certificate Credits . . . . . 17**

# Fire Science

## - Associate of Applied Science

The Associate of Applied Science in Fire Science is for students who expect to further his or her career in the fire service or related fields. The Fire Science program offers students command development and continuing education courses.

**Note:** A "C" or better is required in all classes. Completion of all three Fire Science Certificates and the General Education credits is required for the Associate of Applied Science Degree.

#### AAS General Education Credits

See the AAS General Education Core Requirements section of this catalog for details.

#### Special Requirements

ENG 101 English Composition I . . . . . 3

## Programs of Study

ENG 102	English Composition II. . . . .	3
MAT 151	College Algebra . . . . .	3
<i>Choose one (1) below or higher level</i>		
BIO 100	Biology Concepts . . . . .	(4)
CHM 130	Fundamental Chemistry . . . . .	4
PHY 107	Conceptual Physics . . . . .	(4)
<b>Global Awareness Course. . . . . 3-4</b>		
<b>Technology Course . . . . . 3</b>		

**Total General Education Credits . . . 19-20**

**Program Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 220	Occupational Safety & Health for the Fire Service . . .	3
FSC 131	Fire Protection Hydraulics . . . and Water Supply . . . . .	4
FSC 133	Fire Prevention . . . . .	3
FSC 233	Building Construction for Fire Protection . . . . .	3
FSC 235	Fire Strategy / Tactics. . . . .	3
FSC 221	Fire Administration I. . . . .	3
FSC 222	Fire Protection Systems . . . . .	3
FSC 223	Legal Aspects of the . . . . . Fire Service . . . . .	3
FSC 242	Fire Investigation I. . . . .	3
<b>Program Credits . . . . .</b>		<b>44</b>

**Total Degree Credits . . . . . 63-64**

**Fire Science -  
Fire Fighter  
- Certificate**

The Fire Fighter Certification Program is designed to either prepare a student for a career in the fire service or to enhance the knowledge and skills of an individual who is already employed as a fire fighter.

**Certificate Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 220	Occupational Safety & Health for the Fire Service. . .	3

**Total Certificate Credits . . . . . 19**

**Fire Science -  
Driver/Operator  
- Certificate**

The Driver/Operator Certificate Program is designed to prepare a student for advancement within the fire service to the position of driver/operator.

**Certificate Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Fighter Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 131	Fire Protection Hydraulics and Water Supply . . . . .	4
FSC 133	Fire Prevention . . . . .	3
FSC 220	Occupational Safety & Health for the Fire Service . . .	3
FSC 233	Building Construction for Fire Protection. . . . .	3
FSC 235	Fire Strategy/Tactics . . . . .	3

**Total Certificate Credits . . . . . 32**

**Fire Science -  
Fire Officer  
- Certificate**

The Fire Officer Certificate Program designed to prepare a student for company and officers positions within the fire service.

**Certificate Requirements**

FSC 105	Principles of Emergency Services . . . . .	3
FSC 110	Fire Fighter Academy . . . . .	10
FSC 120	Fire Behavior and Combustion	3
FSC 131	Fire Protection Hydraulics and Water Supply . . . . .	4
FSC 133	Fire Prevention . . . . .	3
FSC 220	Occupational Safety & Health for the Fire Service. . .	3
FSC 221	Fire Administration I. . . . .	3
FSC 222	Fire Protection Systems . . . . .	3
FSC 223	Legal Aspects of the Fire Service . . . . .	3
FSC 233	Building Construction for Fire Protection . . . . .	3
FSC 235	Fire Strategy / Tactics. . . . .	3
FSC 242	Fire Investigation I. . . . .	3

**Total Certificate Credits . . . . . 44**

## Heating, Ventilation & Air Conditioning (HVAC)

### Refrigeration Technology

**- Associate of Applied Science**

The Associate of Applied Science Degree in Refrigeration Technology is designed to provide training in residential heating, ventilation and air conditioning systems, as well as training in commercial HVAC, and commercial and domestic refrigeration systems. Topics will include safety and OSHA, refrigeration theory, residential HVAC installation, systems troubleshooting and repair, advanced electrical and electronic diagnosis and repair, commercial air management, hydronics and computerized energy management systems.

**General Education Credits . . . . . 15-17**

*Choose courses from the AAS General Education Checklist*

**Building Trades Requirements**

BTR 100	Blueprint Reading . . . . .	3
BTR 105	Basic Trades Safety. . . . .	3
BTR 121	Estimating for Residential and Commercial Bldg . . . . .	3

**Building Trade Credits . . . . . 9**

**Additional Requirements**

GBS 101	Introduction to Business . . . . .	3
GBS 102	Human Behavior in the Workplace. . . . .	3
MGT 110	Supervisory Techniques . . . . .	3
GBS 121	Customer Service . . . . .	3

**Additional Credits . . . . . 12**

**Elective Options**

*Choose 6 credits from BUS, CIS, or any trades prefix.*

**Elective Credits . . . . . 6**

**Program Requirements**

HVA 105	Fundamentals of Refrigeration	3
HVA 110	EPA Test Prep . . . . .	1
HVA 120	Residential HVAC Installation	3
HVA 130	Residential HVAC . . . . .	3
HVA 140	Residential Heating . . . . .	2

HVA 150 Refrigeration Electrical Troubleshooting . . . . . 3  
 HVA 210 Commercial Air Management .2  
 HVA 220 Commercial and Domestic Refrigeration . . . . 3  
**Program Credits . . . . . 20**

**Total Degree Credits . . . . . 62-64**



**HVAC  
 Residential  
 - Certificate**

The Certificate in Residential HVAC prepares the student for a career in residential heating, ventilation and air conditioning. Topics will include safety and OSHA requirements, EPA certification, refrigeration theory, residential HVAC systems and installation, air distribution systems and ducting, troubleshooting and repair, including electrical and electronic diagnosis and repair.

**Certificate Requirements**

BTR 105 Basic Trades Safety. . . . . 3  
 HVA 105 Fundamentals of Refrigeration 3  
 HVA 110 EPA Test Prep . . . . . 1  
 HVA 120 Residential HVAC Installation 3  
 HVA 130 Residential HVAC . . . . . 3  
 HVA 140 Residential Heating . . . . . 2  
 HVA 150 Refrigeration Electrical Troubleshooting . . . . . 3

**Total Certificate Credits . . . . . 18**

**HVAC  
 Refrigeration  
 Commercial  
 - Certificate**

The Certificate in Commercial Refrigeration prepares the student for a career in HVAC and refrigeration systems with an emphasis on commercial/ industrial applications. Topics will include safety and OSHA requirements, EPA certification, refrigeration theory, residential and commercial/industrial HVAC systems, and commercial/ domestic refrigeration repair. Advanced techniques for electrical and electronic diagnosis and repair will be emphasized.

**Certificate Requirements**

BTR 105 Basic Trades Safety. . . . . 3  
 HVA 105 Fundamentals of Refrigeration 3  
 HVA 110 EPA Test Prep . . . . . 1  
 HVA 130 Residential HVAC . . . . . 3  
 HVA 150 Refrigeration Electrical Troubleshooting . . . . . 3  
 HVA 210 Commercial Air Management .2  
 HVA 220 Commercial and Domestic Refrigeration . . . . 3  
**Total Certificate Credits . . . . . 18**

**Liberal Arts  
 and Sciences**

**Art**

**- Associate of Arts**

This degree provides students with experience in a variety of art media. This emphasis area is designed to assist students in transferring to fine art and design schools, or four-year degree programs. Included in the program are courses to develop the student's knowledge of art history, design, drawing, painting, ceramics and sculpture.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements (AGEC-A) section of this catalog for details.

**Art Requirements**

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*  
 ART 111 Design I . . . . . 3  
 ART 112 Design II. . . . . 3  
 ART 121 Drawing I . . . . . 3  
 ART 125 Painting I . . . . . 3  
 ART 128 Watercolor I . . . . . 3  
 ART 171 Ceramics I . . . . . 3  
 ART 175 Sculpture I . . . . . 3  
 ART 221 Drawing II . . . . . 3  
 ART 223 Figure Drawing I. . . . . 3  
 ART 130 Survey of World Art I . . . . . 3  
 ART 230 Survey of World Art II . . . . . 3  
**Total Art Requirements . . . . . 15**

**Elective Options**

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses already taken for the AGEC.*

**Elective Credit . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

**Chemistry**

**- Associate of Science**

Students completing the AS-Chemistry will have the academic foundation and experience needed for transfer to a university chemistry degree program.

**General Education Credits . . . . . 37-38**

See the General Education Core Requirements section (AGEC-S) of this catalog for details. These courses must be

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taken as part of the AGEC-S as special requirements for this degree.

MAT 221 Analytic Geometry & Calculus I  
 CHM 151 General Chemistry I  
 CHM 152 General Chemistry II

## Mathematics Requirement

MAT 231 Analytic Geometry and Calculus II. . . . . 4

**Total Mathematics Requirement . . . . . 4**

## Science Requirement

CHM 235 General Organic Chemistry I .4  
 CHM 236 General Organic Chemistry II .4  
 PHY 115 University Physics I . . . . . 5  
 PHY 116 University Physics II . . . . . 5

**Total Science Requirements . . . . . 18**

## Elective Options

*After consulting with an advisor, choose 3 credits from the transferable course chart, excluding courses already taken for the AGEC or for this degree.*

**Elective Credits . . . . . 3**

**Total Degree Credits . . . . . 62-63**

## English

### - Associate of Arts

The Associate of Arts – English degree will provide a student transfer credit to a university with English as the area of concentration. This program includes studies with both literature and writing. Students wishing to transfer to four-year institutions will have the academic foundations applicable to various fields such as journalism, creative writing, communications, teaching and literature studies.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements (AGEC-A) section of this catalog for details.

## English Requirements

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

ENG 136 Report Writing . . . . . 3  
 ENG 137 Introduction to Literature . . . . . 3  
 ENG 138 Creative Writing I. . . . . 3  
 ENG 233 English Literature I . . . . . 3  
 ENG 234 English Literature II . . . . . 3  
 ENG 235 American Literature I . . . . . 3  
 ENG 236 American Literature II. . . . . 3

ENG 238 Writing Fiction . . . . . 3

**Total English Requirements . . . . . 15**

## Elective Options

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses already taken for the AGEC.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

## Geology

### - Associate of Science

Students completing the AS-Geology will have the academic foundation and experience needed for transfer to a university geology degree program.

**General Education Credits . . . . . 37-38**

See the General Education Core Requirements section (AGEC-S) of this catalog for details.

## Special Requirements for the AGEC-S

CHM 151 General Chemistry I . . . . . (4)  
 CHM 152 General Chemistry II . . . . . (4)

## Mathematics Requirement

MAT 231 Analytic Geometry and Calculus II. . . . . 4

**Total Mathematics Requirement . . . . . 4**

## Science Requirements

GLG 101 Physical Geology . . . . . 4  
 GLG 102 Historical Geology. . . . . 4  
 PHY 115 University Physics I . . . . . 5  
 PHY 116 University Physics II . . . . . 5

**Total Science Requirements . . . . . 18**

## Elective Options

*After consulting with an advisor, choose 3 credits from the transferable course chart, excluding courses already taken for the AGEC-S or for this degree.*

**Elective Credits . . . . . 3**

**Total Degree Credits . . . . . 62-63**

## History

### - Associate of Arts

The Associate of Arts - History will provide a student with an instrument to carry transfer credit to a university and declare history as the area of concentration. The program includes global and United States

history, with an emphasis on cultural diversity, and provides the students with the basics in history that are valuable at the university level.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

## History Requirements

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

HIS 131 History of the United States I .3  
 HIS 132 History of the United States II .3  
 HIS 135 Western Civilization I . . . . . 3  
 HIS 136 Western Civilization II . . . . . 3  
 HIS 234 History of Indians of North America. . . . . 3  
 HIS 274 History of Mexico . . . . . 3  
 HIS 281 Latin American History . . . . . 3

**Total History Credits . . . . . 15**

## Elective Options

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

## Life Science

### - Associate of Science

This program is designed for students interested in majoring in biology, botany, zoology, microbiology, wildlife biology, etc. at a four-year university. This emphasis will provide coursework found in the first two years of most baccalaureate programs. Students should select general electives specific to the program and their chosen transfer institution.

**General Education Credits . . . . . 37-38**

See the General Education Core Requirements section (AGEC-S) of this catalog for details.

## Special Requirements for the AGEC-S

CHM 151 General Chemistry I . . . . . (4)  
 CHM 152 General Chemistry II . . . . . (4)

## Mathematics Requirement

MAT 231 Analytic Geometry and Calculus II. . . . . 4

**Total Mathematics Requirement . . . . . 4**



**Science Requirements**

BIO 181 General Biology I . . . . . 4  
 BIO 182 General Biology II . . . . . 4  
 CHM 235 General Organic Chemistry I . 4  
 CHM 236 General Organic Chemistry II .4  
**Total Science Requirements . . . . . 16**

**Elective Options**

*After consulting with an advisor, choose 6 credits from the transferable course chart, excluding courses already taken for the AGEC-S or for this degree.*

**Elective Credits . . . . . 6**

**Total Degree Credits . . . . . 63-64**

**Mathematics**

**- Associate of Arts**

The Associate of Arts - Mathematics is designed for the student who wishes to obtain a broad background in mathematics prior to transferring to a college or university.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

**Math Requirements**

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

MAT 160 Math for Elementary Teacher I . . . . . 3  
 MAT 161 Math for Elementary Teacher II . . . . . 3  
 MAT 181 Plane Trigonometry . . . . . 3  
 MAT 201 Finite Mathematics . . . . . 3  
 MAT 211 Introductory Statistics . . . . . 3  
 MAT 212 Brief Calculus . . . . . 4  
 MAT 221 Analytic Geometry and Calculus I . . . . . 4  
 MAT 231 Analytic Geometry and Calculus II. . . . . 4  
 MAT 241 Analytic Geometry and Calculus III . . . . . 4  
 MAT 260 Introduction to Differential Equations . . . . 4  
**Total Math Requirement Credits . . . . 15**

**Elective Options**

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

**Science**

**- Associate of Arts**

This emphasis area is designed to assist students in transferring to a four-year degree program in science, engineering or pre-professional health science programs (i.e., pre-med, pre-dental, pre-veterinary). This emphasis area allows a flexibility of courses allowing students to tailor coursework to meet the specific requirements of the institution to which they intend to transfer. Courses should be selected with the assistance of an advisor.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

**Science Requirements**

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

BIO 181 General Biology I . . . . . 4  
 BIO 182 General Biology II . . . . . 4  
 BIO 201 Anatomy and Physiology I . . . 4  
 BIO 202 Anatomy and Physiology II . . 4  
 BIO 205 Microbiology . . . . . 4  
 BIO 290 Field Biology I . . . . . 1  
 BIO 291 Field Biology II . . . . . 1  
 CHM 151 General Chemistry I . . . . . 4  
 CHM 152 General Chemistry II. . . . . 4  
 CHM 235 General Organic Chemistry I . 4  
 CHM 236 General Organic Chemistry II . 4  
 ENV 101 Environmental Science . . . . 4  
 GHY 212 Introduction to Meteorology . 4  
 GHY 213 Climate Studies . . . . . 4  
 GLG 101 Physical Geology . . . . . 4  
 GLG 102 Historical Geology. . . . . 4  
 GLG 110 Environmental Geology/. . . . . 4  
     Natural Disaster . . . . . 4  
 PHY 111 General Physics I . . . . . 4  
     **AND**  
 PHY 112 General Physics II . . . . . 4  
     **OR**  
 PHY 115 University Physics I . . . . . 5  
     **AND**  
 PHY 116 University Physics II . . . . . 5  
**Total Science Credits . . . . . 15-16**

**Elective Options**

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

**Social & Behavioral Science**

**- Associate of Arts**

The Associate of Arts Social and Behavioral Science Emphasis degree is a multi-disciplinary program, which provides students wishing to transfer to four-year institutions with the academic foundations applicable to the fields of sociology and psychology.

**General Education Credits . . . . . 35-37**

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

**Social & Behavioral Science Requirements**

*Excluding courses already taken for the AGEC, choose 15 credits from the following:*

PSY 135 Human Sexuality . . . . . 3  
 PSY 232 Psychology of Adjustment . . . 3  
 PSY 234 Social Psychology . . . . . 3  
 PSY 240 Child Growth and Development . . . . . 3  
 PSY 245 Lifespan Development. . . . . 3  
 PSY 260 Introduction to Personality. . . 3  
 PSY 270 Abnormal Psychology . . . . . 3  
 SOC 132 Social Problems in Modern Society . . . . . 3  
 SOC 133 Sociology of Deviant Behavior. . . . . 3  
 SOC 136 Marriage and Family. . . . . 3  
 SOC 140 Racial, Ethnic and Gender Relations . . . . . 3  
 WST 101 Introduction to Women's Studies . . . . . 3

**Degree Requirements. . . . . 15**

**Elective Options**

*After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses that have already been used in the AGEC or degree requirements section.*

**Elective Credits . . . . . 12-15**

**Total Degree Credits . . . . . 62-67**

**Social Studies**

**- Associate of Arts**

The Associate of Arts Social Studies Emphasis will provide a student transfer credit to a university with social studies as the area of concentration. The program includes both global and United States history, cultural diversity, government and

## Programs of Study

geography. It allows students to begin state certification requirements to teach at the elementary or secondary level.

### General Education Credits . . . . . 35-37

See the General Education Core Requirements section (AGEC-A) of this catalog for details.

### Social Studies Requirements

*Excluding courses already taken for the AGECE, choose 15 credits from the following:*

GHY 240	World Regional Geography . . .	.3
HIS 131	History of the United States I . . .	.3
HIS 132	History of the United States II . . .	.3
HIS 135	Western Civilization I . . . . .	.3
HIS 136	Western Civilization II . . . . .	.3
HIS 234	History of Indians of North America . . . . .	.3
HIS 281	Latin American History . . . . .	.3
POS 100	Arizona Constitution and Government . . . . .	.1
POS 120	American National Government . . . . .	.3
POS 227	United States Constitution . . .	.1
<b>Total Social Studies Credits . . . . .</b>		<b>15</b>

### Elective Options

After consulting with an advisor, choose 12-15 credits from the transferable course chart, excluding courses already taken for the AGECE or this degree.

### Elective Credits . . . . . 12-15

### Total Degree Credits . . . . . 62-67

## General Studies

### - Associate of Applied Science

This program is intended for students who wish to explore many areas and broaden their knowledge. It is not designed for students wishing to specialize in some academic area or in a specific program. Such students are encouraged to follow other MCC degree programs. Students are encouraged to work closely with a Academic and Career Advisor to establish their program of studies.

### General Education Credits . . . . . 15-17

See the General Education Core Requirements section Associate of Applied Science (AAS) of this catalog for details.

### Elective Credits . . . . . 50

### Total Degree Credits . . . . . 65-67

## Medical Assisting

### - Associate of Applied Science

The medical assistant is an integral member of the health care delivery team, qualified by education and experience to work in physician's offices and other outpatient settings. The medical assistant performs administrative, clinical and laboratory roles. The medical assistant, a liaison between doctor and patient, is of vital importance to the success of the medical practice.

This degree program prepares the student to take the American Medical Technologist (AMT) – Allied Health Professionals Certification Examination for Registered Medical Assistant. AMT issues national certification and maintains a registry of its certificate holders. This certification requires a minimum of 720 clock hours (or equivalent) of training in Medical Assisting skills (including a clinical externship).

### General Education Special Requirements

from the General Education AAS Checklist	
<b>Communications . . . . .</b>	<b>6</b>
<b>Critical Thinking . . . . .</b>	<b>3-4</b>
<b>Global Awareness</b>	
PSY 101 Introduction to Psychology . . .	.3
<b>Technology</b>	
CIS 131 Microsoft Office Suite . . . . .	.3
<b>Total Credits . . . . .</b>	<b>15-16</b>

### Program Requirements

HES 113	Medical Terminology . . . . .	.3
HES 128	Pharmacology: Allied Health Occupations . . . . .	.3
HES 129	Allied Health Anatomy & Physiology . . . . .	.3
MEA 100	Medical Law and Ethics . . . . .	.3
MEA 105	Medical Office Mgmt w/Comp. Applications . . . . .	.3
MEA 115	Basic Electrocardiograph Techniques . . . . .	.3
MEA 116	Electronic Medical Records . . .	.3
MEA 140	Medical Coding . . . . .	.3
MEA 141	Medical Billing . . . . .	.3
MEA 150	Clinical I. . . . .	.3
MEA 203	Disease Conditions . . . . .	.3
MEA 230	Clinical II . . . . .	.3
MEA 249	Laboratory Techniques . . . . .	.3
MEA 258	Medical Assisting Externship . . .	.5
MEA 260	Medical Assisting Review . . .	.3
<b>Program Credits . . . . .</b>		<b>47</b>

### Total Degree Credits . . . . . 62-63

## Medical Assisting - General Certificate

The medical assistant is an integral member of the health care delivery team, qualified by education and experience to work in physician's offices and other outpatient settings. The medical assistant performs administrative, clinical and laboratory roles. The medical assistant, a liaison between doctor and patient, is of vital importance to the success of the medical practice.

This certificate program prepares the student to take the American Medical Technologist (AMT) - Allied Health Professionals Certification Examination for Registered Medical Assistant. AMT issues national certification and maintains a registry of its certificate holders. This certification requires a minimum of 720 clock hours (or equivalent) of training in Medical Assisting skills (including a clinical externship).

### Certificate Requirements

HES 113	Medical Terminology . . . . .	.3
HES 128	Pharmacology: Allied Health Occupations . . . . .	.3
HES 129	Allied Health Anatomy & Physiology . . . . .	.3
MEA 100	Medical Law and Ethics . . . . .	.3
MEA 105	Medical Office Mgmt w/Comp. Applications . . . . .	.3
MEA 115	Basic Electrocardiograph Techniques . . . . .	.3
MEA 116	Electronic Medical Records . . .	.3
MEA 140	Medical Coding . . . . .	.3
MEA 141	Medical Billing . . . . .	.3
MEA 150	Clinical I. . . . .	.3
MEA 203	Disease Conditions . . . . .	.3
MEA 230	Clinical II . . . . .	.3
MEA 249	Laboratory Techniques . . . . .	.3
MEA 258	Medical Assisting Externship . . .	.5
MEA 260	Medical Assisting Review . . .	.3

### Total Certificate Credits . . . . . 47

## Medical Assisting Insurance Coding - Certificate

The Insurance Coding and Billing Certificate will better prepare our students to sit for either the AHIMA CCA exam or the AAPC CPC exam. Course work applies

to the Medical Assistant Certificate and AAS Degree.

**Certificate Requirements**

HES 113	Medical Terminology . . . . .	.3
HES 128	Pharmacology: Allied Health Occupations . . . . .	.3
HES 129	Allied Health Anatomy & Physiology . . . . .	.3
MEA 100	Medical Law and Ethics . . . . .	.3
MEA 140	Medical Coding . . . . .	.3
MEA 141	Medical Billing . . . . .	.3
MEA 203	Disease Conditions . . . . .	.3
CIS 131	Microsoft Office Suite . . . . .	.3

**Total Certificate Credits . . . . . 24**

**Medical Assisting  
Phlebotomy  
- Certificate**

The phlebotomy certificate prepares our students to sit for the National Registry offered through the American Medical Technologist certification agency.

**Certificate Requirements**

HES 113	Medical Terminology . . . . .	.3
HES 129	Allied Health Anatomy & Physiology . . . . .	.3
MEA 100	Medical Law and Ethics . . . . .	.3
MEA 101	Phlebotomy Techniques . . . . .	.4
MEA 102	Phlebotomy Externship . . . . .	.3
CIS 131	Microsoft Office Suite . . . . .	.3

**Total Certificate Credits . . . . . 19**

**Nursing**

**Registered Nursing - RN  
- Associate of Applied Science**

This program is designed to prepare students for a career as a registered nurse. Students must have completed the prerequisites described below before applying for admission to this program. Students successfully completing the program will be eligible to take the national licensure examination for registered nurses. The program is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission.



**Prerequisite Requirements:**

1. Graduate of an accredited high school or hold a GED certificate, be 18 years of age or older and demonstrate evidence of potential success in the community college, be a transfer student in good standing from another college or university.
2. Successful completion (with a "C" or better) of Fundamentals of Chemistry and a 100-level biology course. Acceptable college courses are:
  - a. BIO 100 Biology Concepts, BIO 181 General Biology or one semester of anatomy and physiology with lab. Students are given the opportunity to, by examination, to demonstrate competency in BIO 100. An examination will be available by appointment on each campus site. If competency is not demonstrated, the course must be taken.
  - b. CHM 130 Fundamentals of Chemistry or CHM 151 General Chemistry I
3. Completion of prerequisites for NUR 121 Nursing I:
  - BIO 201 Anatomy and Physiology I . . .4
  - BIO 202 Anatomy and Physiology II .4
  - BIO 205 Microbiology . . . . . .4
  - ENG 101 English Composition I . . .3
  - MAT 100 level or higher . . . . .3-4
  - PSY 101 Introductory Psychology. . .3
4. College courses over ten (10) years old

- will not be accepted as credit for biology, chemistry or general education science requirements.
- 5. GPA of 2.85 or above in all nursing prerequisites.
- 6. Acceptable score on the Test of Essential Academic Skills (TEAS) (57.3).
- 7. Copy of Department of Public Safety Fingerprint Card
- 8. Extra consideration is given to applicants with additional degree earned, Arizona residency, health care experience and positive references.

A completed application must be submitted for admission to the RN nursing program once the prerequisite courses have been completed. An application for admission may be obtained from any MCC campus academic advisor, at the Nursing Department (1795 Civic Center Blvd., Suite 104, Lake Havasu City, AZ 86403) or online at [www.mohave.edu](http://www.mohave.edu). Application to the Nursing Program is not a guarantee of admission. Call 928.505.3368 for further details.

**Application Requirements**

- Completed Nursing Application
- Three Professional References
- Official College Transcripts (See Admission Information Packet)
- Test of Essential Academic Skills (TEAS) results

# Programs of Study



nursing is essentially the first year of the AAS nursing program with additional studies to address the role of the practical nurse. Students successfully completing this program will be eligible to take the national licensure examination for practical nurses.

### Admission Requirements

See AAS Nursing Requirements

### Fall

NUR 121 Nursing I . . . . .	.8
ENG 102 English Composition II . . . . .	.3
<b>Fall Credits . . . . .</b>	<b>11</b>

### Spring

NUR 122 Nursing II . . . . .	.8
NUR 227 Pharmacology for Nurses . . . . .	.3
NUR 245 Lifespan Development . . . . .	.3
<b>Spring Credits . . . . .</b>	<b>14</b>

### Summer

NUR 123 Transition to Practical Nursing . . . . .	.3
<b>Summer Credits . . . . .</b>	<b>.3</b>

(NUR 221 Nursing III is also acceptable.)

**Total Certificate Credits . . . . . 49-50**

## Nursing

### LPN to RN Track

#### - Associate of Applied Science

This track is designed to transition licensed practical nurses into a registered nurse career in two semesters. Students must have completed the prerequisite courses described below before acceptance into the program. Students successfully completing the program will be eligible to take the national licensure examination for registered nurses. This track is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission.

### Admission Requirements

A completed application must be submitted for admission to the LPN to RN Track.

An application may be obtained at any MCC campus from the any MCC campus academic advisor, at the Nursing Department (1795 Civic Center Blvd., Suite 104 Lake Havasu City, AZ, 86403) or online at [www.mohave.edu](http://www.mohave.edu). Call 928.505.3368 for more details.

- Verification of health care experience
- Verification of residency
- Copy of Department of Public Safety Fingerprint Clearance Card
- Completion of Program and NUR 121 prerequisites.

better and an 85% predictability of passing the NCLEX.

### Health Policy for Nursing

Upon admission to the program, students will be required to:

1. Sign a waiver releasing the Department of Nursing and Mohave Community College from responsibility for injury or illness resulting from exposure to disease, medicines or treatments, and sign a release of medical information.
2. Present evidence of two-step tuberculosis testing within the past year.
3. Provide documentation of measles, mumps, rubella immunizations and a varicella titer.
4. Provide evidence of HBV vaccination series or declination.
5. Provide documentation of physical examination within the six-month period immediately prior to admission to nursing program demonstrating the student's ability to perform the essential functions of the profession with or without reasonable accommodations.
6. Provide evidence of a negative drug screen.
7. Undergo a general background check required by clinical facilities.

## Practical Nursing

### - Certificate

The certificate program in practical

### Program Requirements

#### Fall Year One

NUR 121 Nursing I . . . . .	.8
ENG 102 English Composition II . . . . .	.3
<b>Fall Credits Year One . . . . .</b>	<b>11</b>

#### Spring Year One

NUR 122 Nursing II . . . . .	.8
PSY 245 Lifespan Development . . . . .	.3
NUR 227 Pharmacology for Nursing . . . . .	.3
<b>Spring Credits Year One . . . . .</b>	<b>14</b>

#### Fall Year Two

NUR 221 Nursing III . . . . .	.8
NUR 228 Pharmacology for Nursing . . . . .	.1
Specialties . . . . .	.1
<b>Fall Credits Year Two . . . . .</b>	<b>.9</b>

#### Spring Year Two

NUR 222 Nursing IV . . . . .	.8
NUR 229 Advanced Pharmacology . . . . .	.1
<b>Spring Credits Year Two . . . . .</b>	<b>.9</b>

**Total Degree Credits . . . . . 72-73**

### Requirements for Graduation

Passing all core nursing courses and corequisite courses with a "C" grade or

**Prerequisites**

BIO 100 Biology Concepts (Can demonstrate competency) . . . .4  
 BIO 201 Anatomy and Physiology I . . . .4  
 BIO 202 Anatomy and Physiology II . . . .4  
 BIO 205 Microbiology. . . . .4  
 ENG 101 English Composition I . . . .3  
 ENG 102 English Composition II. . . .3  
 PSY 101 Introductory Psychology . . . .3  
 PSY 245 Lifespan Development. . . .3  
 MAT 100-level Mathematics . . . .3-4  
 NUR 227 Pharmacology for Nursing. . . .3  
 NUR 137 Articulation to the Healing Community . . . .3  
**Total Prerequisite Hours . . . . . 37-38**

**In addition the applicant must:**

1. Be a graduate of an approved/ accredited practical nursing program.
2. Provide a copy of current LPN license to gain credit for Nursing I and Nursing II (16 credits)
3. Have one year of experience as a practicing LPN in good standing.
4. If the applicant has been inactive in nursing for five years or more, the applicant must show evidence of successful completion of a refresher course within the past year.
5. Achieve an acceptable score on the Test of Essential Academic Skills (TEAS).

**Current LPN Licensure/Certificate . . . 16**

**Program Requirements**

**Fall**

NUR 221 Nursing III . . . . .8  
 NUR 228 Pharmacology for Nursing Specialties . . . . .1  
**Total Fall Credits . . . . .9**

**Spring**

NUR 222 Nursing IV . . . . .8  
 NUR 229 Advanced Pharmacology . . . .1  
**Spring Credits . . . . .9**

**Total Degree Credits . . . . . 71-72**

**Nursing - Nurse Refresher Programs**

The RN and LPN Nurse Refresher Courses are designed to assist the nurse in updating

knowledge and skills of current nursing theory and practice. The didactic work is offered online and a clinical component is necessary. The Nurse Refresher Program is approved by the Arizona State Board of Nursing.

An application for admission to the program may be obtained at any MCC campus academic advisor, at the nursing department at the address listed below or online at [www.mohave.edu](http://www.mohave.edu). 1795 Civic Center Blvd., Suite 104, Lake Havasu City, AZ 86403. Call 928.505.3368 for more details.

**Admission Requirements**

Ability to obtain a temporary practice license from the Arizona State Board of Nursing; current CPR card at health care provider level, signed preceptor agreement and required health data. Students must register through the Nursing Office.

NUR 135 PN Refresher. . . . .6  
**Total Credits PN Refresher . . . . .6**

NUR 235 RN Refresher . . . . .9  
**Total Credits RN Refresher . . . . .9**

**Nursing Accelerated Nursing for Paramedics**

**- Associate of Applied Science**

This program is designed to transition paramedics into a registered nurse career in three semesters beginning with summer sessions. Students must have completed the prerequisite courses described below before acceptance into the program and beginning the summer sessions. Students successfully completing the program will be eligible to take the national licensure examination for registered nurses. The program is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission.

**Admission Requirements**

A completed application must be submitted for admission to the Paramedic to RN track of the Nursing Program. An application may be obtained at any MCC campus academic advisor, at the nursing department at the address listed

below or online at [www.mohave.edu](http://www.mohave.edu). The paramedic is required to have current paramedic certification, two years of pre-hospital experience and appropriate Test of Essential Academic Skills (TEAS) scores. 1795 Civic Center Blvd. Suite 104 Lake Havasu City, AZ 86403 Call 928.505.3368 for more details.

**General Education and Nursing Prerequisite Requirements**

BIO 201 Anatomy and Physiology I . . .4  
 BIO 202 Anatomy and Physiology II . . .4  
 BIO 205 Microbiology . . . . .4  
 ENG 101 English Composition I . . . .3  
 ENG 102 English Composition II. . . .3  
 PSY 101 Introductory Psychology. . . .3  
 PSY 245 Lifespan Development. . . .3  
 MAT 121 100-level or above . . . . .3-4  
 Mathematics course . . . . .3-4  
 NUR 227 Pharmacology for Nursing. . .3  
**Total General Education Credits . . 27-28**  
**Nursing Prerequisite Credit. . . . .3**

**Program Requirements Summer**

NUR 150 Transition to Nursing I . . . .3  
 NUR 175 Transition to Nursing II . . . .9  
**Summer Total Credits. . . . .12**

**Fall**

NUR 221 Nursing III . . . . .8  
 NUR 225 Transition to Nursing III . . . .1  
 NUR 228 Pharmacology for Nursing Specialties. . . . .1  
**Fall Total Credits . . . . .10**

**Spring**

NUR 222 Nursing IV . . . . .8  
 NUR 275 Transition to Nursing IV . . . .2  
 NUR 229 Advanced Pharmacology. . . .1  
**Spring Credits . . . . .11**

**Total Degree Credits . . . . . 63-64**

**Nursing Assistant Program and Opportunities**

The Nursing Assistant Program consists of the Nursing Assistant six-credit course designed to prepare the student for the Arizona Board of Nursing Assistant Certification Examination. Prerequisites include appropriate score on assessment test or successful completion of PCS 021 and Healthcare Provider level CPR. The

## Programs of Study

student must also have an acceptable background check and the physical requirements for the course. Applications and information are available on any MCC campus academic counselor, at the Nursing Department (1795 Civic Center Blvd., Suite 104, Lake Havasu City AZ 86403 or online at [www.mohave.edu](http://www.mohave.edu). Call 928.505.3368 for more details.

NUR 115 Nursing Assistant . . . . .6  
**Total Nursing Assistant Credits . . . . .6**

### Medication Assistant

The certified nursing assistant may expand his/her role through accomplishing successful completion of the Medication Assistant course. The course prepares the nursing assistant for additional certification by the Arizona Board of Nursing as Medication Assistant in a long term care facility functioning directly under the supervision of a registered nurse. Call the Nursing Office at 928.505.3368 for additional information.

NUR 117 Medication Assistant Course . . .4  
**Total Medication Asst. Course Credits . . .4**

## Paralegal

### Paralegal - Associate of Applied Science

#### Program Requirements

#### Spring Year One

PAR 101 Legal Research and Writing I .3  
 PAR 102 Introduction to  
 Paralegal Careers . . . . .3  
 PAR 103 Legal Ethics for Paralegals . . .3  
 ENG 101 English Composition I . . . . .3  
 MAT 121 Intermediate Algebra. . . . .4  
**Total Spring Credit Year One . . . . .16**

#### Fall Year One

PAR 104 Civil Law and Litigation . . . . .3  
 PAR 105 Contract Law . . . . .3  
 PAR 106 Criminal Law and Procedure .3  
 ENG 136 Report Writing. . . . .3  
*Choose one Global Awareness course listed in AAS General Education Checklist*  
 Global Awareness Course. . . . . 3-4  
**Total Fall Credits Year One . . . . . 15-16**

#### Spring Year Two

PAR 107 Tort Law . . . . .3  
 PAR 108 Property Law and  
 Real Estate Transactions . . . . .3  
 PAR 201 Legal Research and  
 Writing II . . . . .3  
 PAR 202 Wills, Trusts and Estates . . . .3  
 CIS 131 Microsoft Office Suite . . . . .3  
**Total Spring Credit Year Two . . . . .15**

#### Fall Year Two

PAR 200 Law Office Technology . . . . .3  
 PAR 203 Family Law . . . . .3  
 PAR 204 Corporation Law. . . . .3  
 PAR 205 Bankruptcy . . . . .3  
 ACC 125 Introduction to Accounting  
 Using QuickBooks. . . . .4  
**Total Fall Credit Year Two . . . . .16**

**Total Degree Credits . . . . . 62-63**

### Paralegal - Certificate

This certificate prepares students with an overview of the paralegal profession, learn the ethical rules for members of the legal community, learn how to conduct legal research and basic legal writing skills, how to interpret legal documents, how to interpret case law, how to investigate the facts of a case, how to prepare a case for trial, how to analyze and handle procedural problems, and an overview of law from core courses. Use these skills to become a paralegal, title examiner, trust officer, contract clerk, legal investigator or law firm administrator; or as a foundation for further legal education including later enrollment in law school.

#### Certificate Requirements

PAR 101 Legal Research and  
 Writing I. . . . .3  
 PAR 102 Introduction to  
 Paralegal Careers . . . . .3  
 PAR 103 Legal Ethics for Paralegals . . .3  
 PAR 104 Civil Law and Litigation . . . .3  
 PAR 105 Contract Law . . . . .3  
 PAR 106 Criminal Law and Procedure .3  
 PAR 107 Tort Law . . . . .3  
 PAR 108 Property Law and Real  
 Estate Transactions. . . . .3

**Total Certificate Credits . . . . . 24**

### Paralegal

### Post-Degree Paralegal - Certificate

This certificate is for students who have already earned a two or four-year degree and wish to transition their profession into the legal field.

#### Certificate Requirements

PAR 101 Legal Research and Writing I .3  
 PAR 102 Introduction to  
 Paralegal Careers . . . . .3  
 PAR 103 Legal Ethics for Paralegals . . .3  
 PAR 104 Civil Law and Litigation . . . .3  
 PAR 105 Contract Law . . . . .3  
 PAR 106 Criminal Law and Procedure .3  
 PAR 107 Tort Law . . . . .3  
 PAR 108 Property Law and  
 Real Estate Transactions . . . . .3  
 PAR 200 Law Office Technology . . . .3  
 PAR 201 Legal Research and Writing II 3  
 PAR 202 Wills, Trusts and Estates . . . .3  
 PAR 203 Family Law . . . . .3  
 PAR 204 Corporation Law . . . . .3  
 PAR 205 Bankruptcy . . . . .3

**Total Certificate Credits . . . . . 42**

## Paramedic

### Paramedic Emphasis - Associate of Applied Science

The Associate of Applied Science Paramedic Emphasis is a continuation of the certificate program. For those already employed in the Paramedic field, the program may provide an opportunity for professional growth.

Prerequisites for AAS degree or certificates Prior to entry into any EMS certificate or degree program, the following prerequisites must be met. The student must:

- Pass the assessment test or have completed College Reading (PCS 021) and Pre-algebra (TRM 091) before acceptance into the program. The director of student services must verify completion of this prerequisite by completing the "Assessment Results" portion of the application.
- Complete an application (available

on MCC campuses from the director of student services and from the Emergency Medical Services office) submitted to the EMS office.

- Be 18 years of age or older.
- Be a currently certified Arizona EMT, with one-year pre-hospital documented experience.
- Have successfully completed the Haz-Mat First Responder 24-hour training.
- Have successfully completed written and practical entrance exams and an oral interview.
- Have current CPR certification at the American Heart Association Healthcare Provider or American Red Cross Professional Rescuer level.

Contact the EMS office for other prerequisites and application forms. Upon successful completion of this program, students will be eligible to apply for the certification examination through the Department of Health Services. This program is approved by AZDHS, but successful completion of this program is not the sole criterion for obtaining certification for AZDHS or National Registry. Certification requirements are the exclusive responsibility of AZDHS, and students must satisfy those requirements independently of any requirements for graduation from MCC.

**General Education Special Requirements from the General Education**

**AAS Checklist. . . . . 15-17**

**Paramedic Certificate. . . . . 32**

**Elective Options**

*Choose at least 13 elective credits from the following:*

- ANT 102 Cultural Anthropology . . . . .3
- BIO 100 Biology Concepts . . . . .4
- BIO 181 General Biology I . . . . .4
- CHM 130 Fundamental Chemistry . . . .4
- NUT 203 Human Nutrition in Health & Disease . . . . .3
- PSY 101 Introductory Psychology . . . .3
- SOC 131 Introduction to Sociology . . . .3

**Elective Credits\* . . . . . 13-14**

\* If any of the elective credits are used as part of the AAS General Education Core, they cannot be used again as an elective in this section.

**Total Credit Hours . . . . . 60-63**



**Paramedic –Certificate**

-See prerequisites above  
This certificate prepares students to render pre-hospital emergency care as ambulance, fire department, search and rescue, and volunteer ambulance personnel. Care involves recognizing and managing patients with heart disease, accident injury, burns, poisoning, alcohol and drug overdose, births, acute psychiatric disorders and various medical emergencies. This program meets or exceeds all national DOT requirements. A grade of “C” or better must be maintained in all classes.

**Certificate Requirements**

- EMS 240 Paramedic I . . . . .6
- EMS 241 Paramedic II . . . . .6
- EMS 242 Paramedic III. . . . .6
- EMS 243 Paramedic IV . . . . .6
- EMS 244 Paramedic V . . . . .8

**Total Credit Hours. . . . . 32**

**Pharmacy Technology**

**Associate of Applied Science**

The Associate of Applied Science Pharmacy Technology Degree program provides the basic health care skills students will

use as pharmacy technicians. Pharmacy technicians can find employment in hospitals, nursing care facilities, drug stores, drug manufacturers, wholesale drug houses, and health maintenance organizations. Program graduates are prepared to assist the pharmacist in the packaging and distribution of medication. The AAS degree student will have professional, technical skills with additional education in administration, supervisory skills, and basic sciences. The degree student will have spent considerable time in laboratory and clinical training.

**Requirements**

1. Student must be 18 years of age before externship.
2. No prior felony convictions.
3. No prior drug or pharmacy associated misdemeanor convictions. Students will only be allowed to enter the program during the fall semester. Students must adhere to the prescribed program for completion.

**Fall Year One**

- CHM 130 Fundamentals of Chemistry . .4
- PHT 170 Introduction to Pharmacy Technology . . . . .2
- PHT 171 Pharmaceutical Calculations. .4
- PHT 172 Drug Therapy I. . . . .4

**Fall Credits Year One . . . . . 14**

## Programs of Study



## Physical Therapist Assistant (PTA)

### Physical Therapist Assistant

#### - Associate of Applied Science

The Physical Therapist Assistant program is a two-year course of study designed to prepare the student for the PTA licensing exam. Physical therapist assistants work with people of all ages suffering from weakness, stroke, surgery, orthopedic problems, wounds, spinal cord injury, and brain injury to help them achieve their rehabilitation goals. Physical therapist assistants are usually employed in outpatient physical therapy clinics, hospitals and skilled nursing facilities.

The Physical Therapist Assistant Program at Mohave Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA, 22314; telephone: 703.706.3245; e-mail: [accreditation@apta.org](mailto:accreditation@apta.org); Web site: [www.capteonline.org](http://www.capteonline.org).

All students must apply for admission to PTA program. Students eligible for admission must have an appropriate score on COMPASS exam, or successful completion of TRE 089 and MAT 091, completion of the Health Occupations Basic Entrance Test (HOBET), a minimum of 2.4 cumulative GPA, and no criminal record.

#### Prerequisite

BIO 100 Biology Concepts . . . . .4  
*Students selected for PTA program in spring must complete BIO 100 prior to the start of the fall semester (if not already completed).*

#### Program Requirements

#### Fall Year One

BIO 201 Human Anatomy & Physiology I . . . . .4  
 COM 121 Interpersonal Communication .3  
**OR**  
 COM 151 Public Speaking . . . . . (3)  
 PTA 101 Survey of Physical Therapy. . .3  
 PTA 103 Kinesiology . . . . .4

#### Spring Year One

BIO 100 Biology Concepts . . . . .4  
 ENG 101 English Composition I . . . . .3  
 PHT 174 Pharmacy Operations . . . . .3  
 PHT 178 Pharmacy Microcomputers . .3  
 PHT 187 Pharmacy Law and Ethics . . .3

**Spring Credits Year One . . . . . 16**

#### Fall Year Two

BUS 204 Business Communications  
**OR**  
 COM 121 Interpersonal Communications 3  
 CHM 140 Fundamental Organic and Biochemistry . . . . .4  
 PHT 180 Sterile Products . . . . .4  
 PHT 181 Inter-Professional Relations in Pharmacy . . . . .3  
 PHT 182 Drug Therapy II . . . . .4

**Fall Credits Year Two . . . . . 18**

#### Spring Year Two

PHT 189 Pharmacy Technician Administration. . . . .3  
 PHT 190 Pharmacy Technician Internship . . . . .4  
 SOC 131 Intro to Sociology . . . . .3  
 PSY 101 Intro to Psychology . . . . .3

*Choose one Global Awareness course from the AAS General Education checklist . . 3-4*

**Spring Credits Year Two. . . . . 16**

**Total Degree Credits . . . . . 63-64**

### Pharmacy Technology

#### - Certificate

The Pharmacy Technology Certificate provides the basic health care skills students will use as pharmacy technicians. Pharmacy technicians can find employment in hospitals, nursing care facilities, drug stores, drug manufacturers, wholesale drug houses, and health maintenance organizations. Program graduates are prepared to assist the pharmacist in the packaging and distribution of medication.

#### Certificate Requirements

CHM 130 Fundamentals of Chemistry . .4  
 CHM 140 Fundamental Organic and Biochemistry. . . . .4  
 PHT 170 Introduction to Pharmacy Technology . . . . .2  
 PHT 171 Pharmaceutical Calculations. .4  
 PHT 172 Drug Therapy I. . . . .4  
 PHT 174 Pharmacy Operations . . . . .3  
 PHT 178 Pharmacy Microcomputers . .3  
 PHT 180 Sterile Products . . . . .4  
 PHT 182 Drug Therapy II . . . . .4  
 PHT 187 Pharmacy Law and Ethics . . .3  
 PHT 190 Pharmacy Technician Internship . . . . .4

**Total Certificate Credits . . . . . 39**



PTA 200 Patient Mobility Techniques . . .4  
**Fall Credits Year One . . . . . 18**

**Spring Year One**

BIO 202 Human Anatomy & Physiology II . . . . .4  
 PTA 202 Physical Therapy Modalities . .5  
 PTA 203 Clinical Pathology . . . . .3  
 PTA 205 Communication in Physical Therapy . . . . .2  
 PTA 214 Electromodalities . . . . .3  
 PTA 215 Wound Care . . . . .1  
**Spring Credits Year One . . . . . 18**

**Summer Year One**

PTA 206 Clinical Practicum I . . . . .4  
 PTA 217 Clinical Neurology . . . . .2  
**Summer Credits Year One . . . . . 6**

**Fall Year Two**

PTA 208 Rehabilitation of Special Populations . . . . .5  
 PTA 210 Orthopedic Physical Therapy .4  
 ENG 101 English Composition I . . . . .3  
 PSY 101 Introduction to Psychology . .3  
 PTA 230 Physical Therapy Seminar . .3  
**Fall Credits Year Two . . . . . 18**

**Spring - Year Two**

PTA 280 Clinical Practicum II . . . . .6  
 PTA 290 Clinical Practicum III . . . . .6  
**Spring Credits Year Two . . . . . 12**

**Total Credit Hours. . . . . 72**

**Radiology**

**- Partnership with Arizona Western College**

MCC currently has an articulation agreement with Arizona Western College (AWC) that will allow Mohave County students to take the courses that are prerequisites for admission to AWC's Radiologic Technology Program. A student would take the courses listed below, apply to AWC and the Radiologic Technology department, and then transfer to AWC to attain the degree.

The Radiologic Technology program is a comprehensive competency-based program of study that prepares students to take the National Registry Examination offered by the American Registry of Registered Technologists and allows

successful students to graduate with entry-level expertise in the field of diagnostic radiology. Students will be able to use critical thinking skills and the application of technology for the fulfillment of personal goals, for community-centered professional practice, or to be eligible for education and training in other specialized diagnostic imaging fields.

**Prerequisite Requirements**

BIO 160 Anatomy & Physiology of Human Structure & Function .4  
**OR**  
 BIO 201 Anatomy & Physiology I . . . (4)  
**AND**  
 BIO 202 Anatomy & Physiology II . . . (4)  
 CIS 110 Intro. to Computer Information Systems . . . . .3  
 ENG 101 English Composition I . . . . .3  
 ENG 102 English Composition II . . . . .3  
 HES 113 Medical Terminology . . . . .3  
 MAT 142 College Mathematics . . . . .3  
 PSY 101 Introductory Psychology . . .3  
**Total Prerequisite Credits . . . . . 22-26**

**Elective Options**

*Choose 1 elective from the following:*  
 ART 130, ART 230, ENG 137, ENG 233, ENG 234, ENG 235, ENG 236, HUM 150, HUM 151, HUM 250, MUS 101, PHI 101, PHI 151,  
**OR**  
 PHI 205 . . . . .3  
**Elective Credits . . . . . 3**

**Total Credits . . . . . 25-29**

**Surgical Technology**

**Surgical Technology - Associate of Applied Science**

**Prerequisites**

- HES 113 Medical Terminology and CPR at the health care provider level.
- Appropriate score on the COMPASS exam (reading, writing and math) or successful completion of TRE 089 and TRM 090.
- Successful completion of BIO 100. STU 103 is required for students without previous 100-level or higher college experience.

**Health Policy for Surgical Technology**

Upon admission, students will be required to:

1. Sign a waiver releasing Mohave Community College from the responsibility for injury or illness resulting from exposure to disease, medicines or treatments and sign a release of medical information.
2. Present evidence of two-step tuberculosis testing within the past year.
3. Provide a documentation of measles, mumps, rubella immunizations and a varicella titer.
4. Provide evidence of HBV vaccination series or declination.
5. Provide documentation of physical examination within six months prior to admission to surgical technology program demonstrating the student's ability to perform the essential functions of the designated profession with or without reasonable accommodations.
6. Provide evidence of a negative drug screen.

**Requirements for Completion of Surgical Technology Program**

Students who choose to pursue a baccalaureate degree need to be aware that the surgical technology courses are specialized to produce a surgical technologist in a two-year period of time. Other colleges and universities may not offer equivalent training and they may not grant any transfer credit.

This two-year program prepares the student to take the national certification examination for Surgical Technology. The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Accreditation Review Committee on Education in Surgical Technology.

In order to progress within the Surgical Technology Program and achieve status as a candidate for graduation, the student must achieve a minimum of a 75 percent in all Surgical Technology courses and pass Clinical Lab and Clinical Site Competencies.

**General Education Requirements**

*Choose courses from the AAS General Education Checklist.*

## Programs of Study

### Special Requirement for

#### Critical Thinking and Reasoning

BIO 201	Anatomy and Physiology I . . . . .	.4
<b>Total General Education Credits</b>		<b>.6</b>

#### Additional Requirements

MEA 100	Medical Law and Ethics . . . . .	.3
BIO 202	Anatomy & Physiology II . . . . .	.4
<b>Total Additional Credits.</b>		<b>.7</b>

#### Program Requirements

SGT 121	Orientation and Introduction to Surgery . . . . .	.2
SGT 122	Surgical Techniques . . . . .	.4
SGT 125	Microbiology for the Surgical Technologist . . . . .	.2
SGT 123	Pharmacology for Surgical Technology . . . . .	.1
SGT 221	Surgical Concepts . . . . .	.2
SGT 222	Surgical Procedures . . . . .	.6
SGT 223	Introduction to the Operating Room . . . . .	.2
SGT 224	Surgical Complications . . . . .	.4
SGT 225	Surgical Technology Externship I . . . . .	.7
SGT 226	Surgical Technology Externship II . . . . .	.7
<b>Total Program Credits.</b>		<b>37</b>

**Total Degree Credits . . . . . 67**

## Truck Driver Training

### Truck Driver Training - Certificate

Truck Driver Training Certificate will provide students with 150 hours of instruction with one-on-one, hands-on training to obtain a Commercial Drivers License (CDL) to begin the students' career in the transportation industry. The program includes an ongoing placement service and refresher training for program graduates. Students interested in the program should contact the program director on the Neal Campus-Kingman for further information, application to the program and cost. Courses are only available as part of the CDL training program and are not offered individually.

#### Certificate Requirements

TDT 100	Basic Operation . . . . .	.2
TDT 110	Safe and Advanced Operating Practices . . . . .	.2

TDT 120	Vehicle Maintenance . . . . .	.1
TDT 130	Non-vehicle Activities . . . . .	.2
TDT 140	Preparation for CDL Written Exam . . . . .	.1

**Total Certificate Credits . . . . . 8**

### Refund Policy

Refunds for MCC's Truck Driver Training program are offered in conjunction with SAGE Corporation. SAGE applies the following refund policy to students who have paid required school charges (tuition, fees, etc.). A full refund will be provided to any student who cancels prior to starting class, or who terminates from the program for any reason up to the third day of classes. After the third day of classes, no refund shall be given. In the event of any refund, SAGE shall retain a processing fee of \$100.

## Welding Technology

### - Associate of Applied Science

This degree provides training in Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Gas Metal Arc Welding, Flux Core Arc Welding-Gas Shielded, Flux Core Arc Welding-Self Shielded and welding certifications for students to be employed as a welder.

#### General Education Special Requirements from the General Education

AAS Checklist . . . . .	15-16
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#### Critical Thinking and Reasoning

WLD 114	Math for Welders
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#### Program Requirements

DFT 100	Technical Sketching /Drawing .3
WLD 125A	Shielded Metal Arc Welding I . . . . . .3
WLD 125B	Shielded Metal Arc Welding II . . . . . .3
WLD 129	Gas Metal Arc Welding . . . . . .3
WLD 201	Flux Cored Arc Welding . . . . . .3
WLD 228	Comprehensive Gas Tungsten Arc Welding . . . . . .3
WLD 231	Welding Print Reading . . . . . .3
<b>Total Program Credits.</b>	<b>21</b>
<i>Choose one elective.</i>	<i>.3</i>

**Total Degree Credits . . . . . 61-62**

### Welding Technology

#### Wire Feed and Shielded Metal Arc - Certificate

This certificate prepares students for maintenance welding, home welding and an entry-level welder positions using gas metal arc welding, flux core arc welding-gas shielded, flux core arc welding; self shielded, shielded metal arc welding, and oxyacetylene welding and cutting.

#### Certificate Requirements

WLD 114	Math For Welders . . . . .	.3
WLD 125A	Shielded Metal Arc Welding .3	
WLD 125B	Shielded Metal Arc Welding .3	
WLD 129	Gas Metal Arc Welding . . . . .	.3
WLD 201	Flux Cored Arc Welding . . . . .	.3
WLD 228	Comprehensive Gas Tungsten Arc Welding . . . . .	.3

**Total Certificate Credits . . . . . 18**

#### Welding Technology Shielded Metal Arc (SMAW) -Certificate

This certificate prepares students to obtain entry-level positions in Shielded Metal Arc Welding.

#### Certificate Requirements

BTR 105	Basic Trades Safety . . . . .	.3
WLD 102	Cutting Process & Welding Quality . . . . .	.3
WLD 105	Weld Fit Up/Inspection/ Metallurgy . . . . .	.2
WLD 231	Blueprint Reading . . . . .	.3
WLD 125A	SMAW Plate I . . . . .	.3
WLD 125B	SMAW Plate II . . . . .	.3
<b>Total Certificate Credits:</b>		<b>17</b>

#### Welding Technology Gas Tungsten Arc Welding (GTAW) -Certificate

This certificate prepares students to obtain entry-level positions in Gas Tungsten Arc Welding.

#### Certificate Requirements

BTR 105	Basic Trades Safety . . . . .	.3
WLD 114	Math for Welders . . . . .	.3

- WLD 231 Blueprint Reading . . . . .3
- WLD 126 Gas Tungsten Arc Welding I . . .3
- WLD 226 Gas Tungsten Arc Welding II . .3
- WLD 228 Gas Tungsten Arc Welding Pipe

**Total Certificate Credits: . . . . . 18**

**Welding Technology  
Gas Metal Arc Welding  
(GMAW)**

**-Certificate**

This certificate prepares students to obtain entry-level positions in Gas Metal Arc Welding and Flux Core Arc Welding.

**Certificate Requirements**

- BTR 105 Basic Trades Safety. . . . .3
- WLD 114 Math for Welders . . . . .3
- WLD 129 GMAW/FCAW Welding . . . . .3
- WLD 231 Blueprint Reading . . . . .3
- WLD 201 FCAW Pipe . . . . .3
- WLD 229 GMA Pipe . . . . .3

**Total Certificate Credits: . . . . . 18**

**Welding Technology  
Entry-Level I Welder  
-Certificate**

This certificate includes basic welding concepts that will prepare students to obtain an entry-level position within the field.

**Certificate Requirements**

- BTR 105 Basic Trades Safety. . . . .3
- WLD 105 Weld Fit Up/Inspection/  
Metallurgy . . . . .2
- WLD 102 Cutting Process & Welding  
Quality . . . . .3
- WLD 114 Math for Welders . . . . .3
- WLD 129 Gas Metal Arc Welding . . . . .3
- WLD 231 Blueprint Reading . . . . .3
- WLD 125A SMAW Plate I . . . . .3
- WLD 125B SMAW Plate II . . . . .3
- WLD 201A Flux Cored Arc Welding . . . .3

**Total Certificate Credits . . . . . 26**



**Welding Technology  
Entry-Level II Welder  
-Certificate**

This certificate presents advanced welding concepts and techniques.

**Certificate Requirements**

- WLD 105 Weld Fit Up/Inspection/  
Metallurgy . . . . .2
- WLD 261 SMAW Open V-Butts/Plate I . . .3
- WLD 262 SMAW Open V-Butts/ Plate II . .3
- WLD 263 SMAW Open Root/Pipe I . . . .3
- WLD 264 SMAW Open Root/Pipe II . . . .3
- WLD 229 GMAW Pipe. . . . .3
- WLD 201B FCAW Pipe . . . . .3
- WLD 228 Gas Tungsten Arc Welding  
Pipe I . . . . .3
- WLD 229 Gas Metal Arc Welding Pipe . . .3

**Total Certificate Credits . . . . . 26**

*NOTE: Students must complete all requirements for Welding Level I and II before receiving the Welding Level II certificate.*



## Course Prefix Chart

<b>PREFIX</b>	<b>FULL NAME</b>		
ACC	Accounting	GLG	Geology
ACT	Automotive Collision Repair Technology	HES	Health Science
AJS	Administration of Justice	HIS	History
ANT	Anthropology	HUM	Humanities
ART	Art	HVA	Heating, Ventilation and Air Conditioning
ASE	Automotive Service Technology	MAT	Mathematics
ASL	American Sign Language	MEA	Medical Assisting
AST	Astronomy	MUS	Music
AVI	Aviation	NUR	Nursing
BIO	Biology	NUT	Nutrition
BTR	Building Trades	PAR	Paralegal
BUE	Business and Entrepreneurship	PCS	Precollege Studies
BUS	Business	PHI	Philosophy
CDA	Childhood Development Associate	PHT	Pharmacy Technology
CHD	Chemical Dependency Studies	PHY	Physics
CHM	Chemistry	PLU	Plumbing
CIS	Computer Information Systems	POS	Political Science
COM	Communication	PSY	Psychology
CUL	Culinary Arts	PTA	Physical Therapist Assistant
DAE	Dental Assisting	SGT	Surgical Technology
DEH	Dental Hygiene	SOC	Sociology
DFT	Drafting	STU	Student Study Skills
ECE	Early Childhood Education	SPA	Spanish
EDU	Education	TDT	Truck Driver Training
ELA	English Language Acquisition	THE	Theatre
ELC	Electrical	TRE	Transitional English
EMS	Emergency Medical Services	TRM	Transitional Math
EGR	Engineering	WLD	Welding
ENG	English	WST	Women's Studies
ENV	Environmental Science		
FRE	French		
FSC	Fire Science		
GHY	Geography		

100-level course with a prerequisite of PCS 021 requires a minimum COMPASS reading score of 74. 100-level courses with no prerequisite require a minimum COMPASS reading score of 70.

## Course Descriptions

### ACCOUNTING

#### ACC 125 | INTRODUCTION TO ACCOUNTING USING QUICKBOOKS (4)

**Four lecture** | *Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM090*

This course introduces students to accounting concepts and theory for the preparation and analysis of financial information. Content includes financial statement fundamentals, cash, receivables, inventory, payables, long-term assets, long-term debt, stockholders' equity, cash flow statements, internal controls, and financial statement analysis. Students will apply their knowledge of the generally accepted accounting principles to the complete accounting cycle through financial statement preparation using QuickBooks software.

#### ACC 135 | ACCOUNTING SYSTEMS AND PROCEDURES (3)

**Threelecture** | *Prerequisite: Successful completion of ACC 125*

Provides study and practice in the preparation of source documents, flowcharts, journal entries, adjusting entries, general ledgers, subsidiary ledgers, bank reconciliations, depreciation schedules, payroll records, financial statements and the statement of cash flow.

#### ACC 139 | INCOME TAX ACCOUNTING (3)

**Threelecture** | *Prerequisite: Successful completion of ACC 125*

The study of current federal income tax concepts, requirements, procedures and forms. Income inclusions and exclusions, capital gains and losses, business and personal deductions, and tax accounting methods will be studied. Computerized tax software may be used.

#### ACC 143 | PAYROLL PROCEDURES (3)

**Threelecture** | *Prerequisite: Successful completion of ACC 125.*

Instructional focus includes the development and understanding of payroll principles and the ability to perform payroll work by preparing payroll, both manually and on the computer. Topics such as payroll functions, timekeeping techniques, payroll accounting records, check writing, preparation of federal and state payroll reports are

included along with insurance reports and retirement plan reports.

#### ACC 155 | COST ACCOUNTING (3)

**Three lecture**

*Prerequisite: Successful completion of ACC 135*

Covers the application of cost concepts in manufacturing under different costing methods. Job, process, standard, variable, and activity-based costing will be studied. The use of short- and long-term decision techniques that focus on cost-volume-profit analysis, incremental analysis and capital budgeting will be explored. Additional topics such as inventory control, just-in-time manufacturing, cost allocation methods, and decentralization issues with transfer pricing will also be examined.

#### ACC 225 | INTERMEDIATE ACCOUNTING I (3)

**Threelecture** | *Prerequisite: Successful completion of ACC 135*

An in-depth study of financial accounting topics, including the conceptual framework for financial reporting and financial accounting principles. Financial statement preparation and analysis, the use and calculation of compound interest, annuities and present value, cash receivables, and inventory valuations will be studied.

#### ACC 230 | INTERMEDIATE ACCOUNTING II (3)

**Threelecture** | *Prerequisite: Successful completion of ACC 225*

A continuation of ACC 225, provides an in-depth exploration of property, plant and equipment depreciation and depletion, intangible assets, current and contingent liabilities, long-term liabilities, capital stock, additional paid-in capital, retained earnings and earnings per share calculations.

#### ACC 250 | NON-PROFIT AND GOVERNMENTAL ACCOUNTING (3)

**Threelecture** | *Prerequisite: Successful completion of ACC 230*

An introduction to accounting and financial reporting for governmental and not-for-profit entities. The financial operation and accounting procedures, such as fund accounting used by state and local government agencies, health care organizations, colleges and universities will be studied. Contrasts between standard for-profit accounting

procedures and non-profit accounting procedures will be emphasized.

### ADMINISTRATION OF JUSTICE

#### AJS 101 | INTRODUCTION TO ADMINISTRATION OF JUSTICE (3)

*Transferable Course* | **Three lecture**

This course lays a foundation for the study of criminal justice by analyzing and describing the agencies of justice and the procedures they use to identify and treat criminal offenders.

#### AJS 109 | SUBSTANTIVE CRIMINAL LAW (3)

*Transferable Course* | **Three lecture**

The justice system and all its components are dependent on the concept of criminal law, where human conduct is regulated through rules, laws and legal definitions. To understand modern criminal law, one must examine and understand the multitude of ways in which criminal law is defined.

#### AJS 140 | INTRODUCTION TO CORRECTIONS (3)

*Transferable Course* | **Three lecture**

Provides a history of correctional development, operations and the administration of correctional institutions. The course will introduce the student to the development of new correctional programs and the future of correctional institutions.

#### AJS 160 | LEADERSHIP AND TEAM DYNAMICS IN PUBLIC SAFETY (3)

**Three lecture**

Provides fire and law enforcement personnel the skills necessary to be effective leaders in a public safety services environment. The student will learn the different types of leadership styles and identify the leadership characteristics and dynamics necessary to be an effective leader. The characteristics of positive team development will also be covered.

#### AJS 190 | SPECIAL PROJECT CURRENT TRENDS AND ISSUES IN CRIMINAL JUSTICE (.5 - 4)

**One-half to four lecture**

Current trends and issues on a variety of subjects of interest to criminal justice and related fields.

## **AJS 200 | CURRENT ISSUES (3)**

*Transferable Course* | **Three lecture**

Issues, techniques and trends in the criminal justice system.

## **AJS 212 | JUVENILE JUSTICE PROCEDURES (3)**

*Transferable Course* | **Three lecture**

This course will help students understand the nature and causes juvenile delinquency and correlates the current strategies being used to control and eliminate its occurrence.

## **AJS 225 | CRIMINOLOGY (3)**

*Transferable Course* | **Three lecture**

Study of deviance, society's role in defining behavior; theories of criminality and the economic, social and psychological impact of crime and victimization; and relationships between statistics and crime trends.

## **AJS 230 | THE POLICE FUNCTION (3)**

*Transferable Course* | **Three lecture**

Examines how the police must comply with myriad policies and legal constraints while facing immense pressures from diverse populations and other stakeholders.

## **AJS 240 | THE CORRECTION FUNCTION (3)**

*Transferable Course* | **Three lecture**

Provides a history of correctional development, operations and the administration of correctional institutions. This course will introduce the student to the development of new correctional programs and the future of correctional institutions.

## **AJS 242 | CORRECTIONAL OFFICERS TRAINING ACADEMY (18)**

**Eighteen lecture**

This academy will provide individuals with a basic understanding of workplace relations, ethical staff/inmate relationships, inmate management and manipulation.

## **AJS 245 | ETHICS IN CRIMINAL JUSTICE (3)**

*Transferable Course* | **Three lecture**

This course examines the ethical issues that are faced by law enforcement officers, prosecutors, defense attorneys, judges, and correctional officers.

## **AJS 260 | PROCEDURAL CRIMINAL LAW (3)**

*Transferable Course* | **Three lecture**

This course offers a student a thorough examination of the system of justice used in the United States: civil and criminal, juvenile and therapeutic.

## **AJS 270 | COMMUNITY POLICING (3)**

*Transferable Course* | **Three lecture**

Examines the philosophical and organizational facets of Community Policing which promotes mutual cooperation between the police and the community to solve problems of crime and to improve the overall conditions of a neighborhood.

## **AJS 275 | CRIMINAL INVESTIGATION (3) Three lecture**

Theory of criminal investigation, crime scene procedures, case preparation, interviewing and basic investigative techniques.

## **AMERICAN SIGN LANGUAGE**

### **ASL 101 | AMERICAN SIGN LANGUAGE I (4)**

*Transferable Course* | **Four lecture; one lab**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Develop basic receptive and expressive conversational skills, basic grammar and syntax and knowledge of the deaf community and deaf culture.

### **ASL 102 | AMERICAN SIGN LANGUAGE II (4)**

*Transferable Course* | **Four lecture; one lab**

*Prerequisite: Successful completion of ASL 101.*

Further development of receptive/expressive skills for communicating with people who are deaf using sign: finger spelling, vocabulary, grammar and culture.

### **ASL 110 | FINGERSPELLING I (2)**

**Two lecture** | *Prerequisite: Successful completion of ASL 101 or ASL 131.*

This course develops students' understanding of the use of finger spelling in the context of American Sign Language and then strives to assist students in developing fluency and clarity as they increase their re-

ceptive and expressive finger-spelling speed. This class starts with a review of finger spelling hand shapes, which the student learned in previous classes. Emphasis will be placed on learning finger spelling as phonetic elements used in the English Language as well as configuration, content and cloze skills.

### **ASL 131 | CONVERSATIONAL ASL I (3)**

*Transferable Course* | **Three lecture**

This course gives students a first look at American Sign Language. Readiness activities are conducted focusing on visual/receptive skills and basic communication. Students will have an opportunity to develop a rudimentary syntactic knowledge of American Sign Language (ASL), a rudimentary vocabulary and rudimentary conversational skills.

### **ASL 201 | AMERICAN SIGN LANGUAGE III (4)**

*Transferable Course* | **Four lecture; one lab**

*Prerequisite: Successful completion of ASL 102.*

Reviews American Sign Language vocabulary, language functions and grammatical structures presented in ASL 101 and 102. Focuses on grammatical and vocabulary expansion with emphasis on idiomatic usage and socio-cultural communicative functions. Continues development of communicative competence in ASL to enable students to express opinions, detail descriptions and participate in lengthier discourse and sign narratives.

### **ASL 202 | AMERICAN SIGN LANGUAGE IV (4)**

*Transferable Course* | **Four lecture; one lab**

*Prerequisite: Successful completion of ASL 201 or permission of academic chair.*

A continuation of ASL 201. Further development of American Sign Language communication skills and vocabulary with emphasis on spontaneous conversation, discussions and narratives.

## **ANTHROPOLOGY**

### **ANT 102 | CULTURAL ANTHROPOLOGY (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment*

## Course Descriptions

test or successful completion of PCS 021 and TRE 089.

An introduction to the principles of social and cultural systems, technology, social organization and ideology.

### ART

#### ART 111 | DESIGN I (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.**

A study of the elements and principles of design as a basis for the visual arts. Development of perception, imagination and expression through problem solving, discussions and critical evaluation is included. Emphasis is on two-dimensional work.

#### ART 112 | DESIGN II (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.** Prerequisite:

*Successful completion of ART 111 or permission of academic chair.*

A study of the elements and principles of design applied to three dimensional work. Develop perception, imagination and expression of three-dimensional form.

#### ART 113 | THE SCIENCE OF COLOR (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.**

A study of color theory. Course includes color mixing, the interaction and emotive qualities of colors.

#### ART 121 | DRAWING I (3)

SUN# ART 1111

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.**

An introduction to fundamental approaches to drawing. Emphasis is on the development of perceptual skills, composition, critical analysis and basic techniques while using a variety of media.

#### ART 125 | PAINTING I (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.** Prerequisite: *Successful completion of ART 121 or permission of academic chair.*

Oil/acrylic. An introduction to painting techniques; including the study of color and composition. Emphasis is on personal creativity and uniqueness of expression.

#### ART 126 | PAINTING II (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.** Prerequisite: *Successful completion of ART 125 or permission of academic chair.*

Further study of painting techniques, color and composition. Emphasis is on improvement of technique, exploration and expression.

#### ART 128 | WATERCOLOR I (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.**

Prerequisite: *Successful completion of ART 121 or permission of academic chair.*

An introduction to the techniques and materials used in painting water-soluble media. Emphasis is on techniques, composition and color.

#### ART 129 | WATERCOLOR II (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.**

Prerequisite: *Successful completion of ART 128 or permission of academic chair.*

A continuation of the study of materials and techniques for aqueous painting. Emphasis is on control of the media and individual style.

#### ART 130 | WORLD ART HISTORY I (3)

 ART 1101

*Transferable Course* | Three lecture

Prerequisite: *Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

A survey course designed to acquaint students with the history, meaning and evolution of art produced by various cultures around the world from Prehistoric times to the Renaissance.

#### ART 151 | BASIC BLACK AND WHITE PHOTOGRAPHY (3)

*Transferable Course* | Course Fee: \$30

**Two lecture; two lab.**

An introduction to photography as a medium of personal expression stressing imaging concepts and composition with developing visual awareness. The course introduces exposure control and basic black and white darkroom procedures.

#### ART 152 | BASIC PHOTOGRAPHY (3)

*Transferable Course* | Course Fee: \$30

**Two lecture; two lab.**

An introduction to photography that stresses developing visual awareness of the world around us, fundamental composition and imaging concepts, basic digital image pro-

cessing and technical understanding.

#### ART 171 | CERAMICS I (3)

*Transferable Course* | Course Fee: \$60

**Two lecture; three lab.**

An introduction to the nature of clay and glazes, hand-forming methods, throwing on the potter's wheel, decorative processes and glaze application. Emphasis will be placed on hand-building processes and surface enrichment.

#### ART 172 | CERAMICS II (3)

*Transferable Course* | Course Fee: \$60

**Two lecture; three lab.**

Prerequisite: *Successful completion of ART 171 or permission of academic chair.*

An introduction to techniques using the potter's wheel and continued studies in design and aesthetics, glaze applications, decorative processes, clays and firing.

#### ART 175 | SCULPTURE I (3)

*Transferable Course* | Course Fee: \$45

**Two lecture; three lab.**

An introductory study emphasizing three-dimensional form and basic sculpture techniques and materials.

#### ART 176 | SCULPTURE II (3)

*Transferable Course* | Course Fee: \$45

**Two lecture; three lab.** Prerequisite: *S*

*successful completion of ART 112 and ART 175.* Instruction in techniques, materials and processes for aesthetic expression in sculpture.

#### ART 221 | DRAWING II (3)

*Transferable Course* | Course Fee: \$15

**Two lecture; three lab.** Prerequisite:

*Successful completion of ART 121*

Continued development of drawing skills building on basic techniques and an exploration of color, mixed media and greater expressive content.

#### ART 223 | FIGURE DRAWING I (3)

*Transferable Course* | Course Fee: \$60

**Two lecture; three lab.** Prerequisite: *S*

*successful completion of ART 121 or permission of academic chair.*

Includes the development of skill and expressiveness in drawing from the human figure.

#### ART 230 | WORLD ART HISTORY II (3)

 ART 1102

*Transferable Course* | Three lecture



*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

A survey course designed to acquaint students with the history, meaning and evolution of art produced by various cultures around the world from the Renaissance to present day.

## **ART 251 | INTERMEDIATE PHOTOGRAPHY (3)**

*Transferable Course* | **Course Fee: \$30**

**Two lecture; two lab.**

*Prerequisite: Successful completion of ART 152.* Stresses a continuing visual awareness of the world around us, critical analysis of image composition, advanced imaging concepts, advanced digital image processing software, and an understanding of the technical aspects of the digital camera and the digital darkroom.

## **ART 256 | DIGITAL PHOTOGRAPHY I (3)**

*Transferable Course* | **Course Fee: \$30**

**Two lecture; three lab**

*Prerequisite: Successful completion of ART 111 or permission of academic chair.*

An introduction to the fine art applications of the digital darkroom. Includes art theory and the use of digital cameras, scanners, editing software and printers. Emphasis is placed on the elements and principles of art and how they are applied to digital images.

## **ASTRONOMY**

### **AST 101 | INTRODUCTION TO ASTRONOMY (3)**

*Transferable Course* | **Course Fee: \$30**

**Three lecture; three lab.** *Prerequisite: Successful completion of TRM 091.*

An introduction to astronomical processes, theories and features in the universe. Techniques and tools of the astronomer and the astrophysicist are included. Topics covered include concepts in: dynamics of motion, properties of light, astronomical techniques for observation, solar system components, stellar and planetary formation, evolution and classifications of stars, star clusters and nebula, galaxy structure and formation, chemistry, structure and origin of the universe. Laboratory work is included to provide observational examples of the above topics and to learn techniques of data gathering and interpretation.

## **AUTOMOTIVE COLLISION REPAIR TECHNOLOGY**

### **ACT 110 | SAFETY IN COLLISION REPAIR (2)**

**Two lecture.** *Prerequisite: Appropriate score on assessment test or successful completion of the TRE 089.*

Introduces the student to safety techniques and shop operations as they relate to shop safety and industry standards. The student is presented safety regulations and auto collision business operations.

### **ACT 111 | METAL WELDING AND CUTTING I (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Corequisite: ACT 110*

Introduction to sheet metal oxygen-acetylene welding and MIG welding techniques including safety, materials equipment, and setups. Personal and vehicle protective measures prior to welding procedures is presented.

### **ACT 121 | NON-STRUCTURAL REPAIR PREPARATION (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Corequisite: ACT 111.*

Identifies the basic characteristics of preparation for automotive repair. Students familiarize themselves with damage analysis, extent of damage and the sequence of repair. Focuses on removal of vehicle components and protection of panels along with storage and labeling of parts. Safety procedures and equipment use are included.

### **ACT 123 | METAL FINISHING AND BODY FILLING (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Corequisite: ACT 121*

Procedures and processes used in metal finishing and metal shrinking and the use of cosmetic fillers. Emphasis is placed on the use of proper tools required to perform these tasks, including use, selection, and safety procedures for tools and equipment selected.

### **ACT 141 | REFINISH SAFETY (1)**

**Course Fee: \$55 | One lecture**

*Corequisite: ACT 123*

Introduces the use of safety procedures and equipment in auto body refinishing. Em-

phasizes national and state guidelines for proper disposal and handling of hazardous materials and the correct use of personal protective equipment.

### **ACT 142 | SURFACE PREPARATION I (2)**

**Course Fee: \$110 | One lecture; two lab**

*Corequisite: ACT 141*

Introduces surface preparation techniques used for auto body refinishing. Emphasizes the correct selection and application of primers.

### **ACT 143 | SPRAY EQUIPMENT OPERATION (2)**

**Course Fee: \$110 | One lecture; two lab**

*Corequisite: ACT 142.*

Prepares the student for the inspection, cleaning and determination of the condition of spray guns and related equipment. Students learn skills for adjusting spray guns by setting-up and testing spray gun operations.

### **ACT 150 | PANEL REPAIR AND REPLACEMENTS (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Prerequisite: Successful completion of ACT 143.*

Discusses straightening techniques including tension pulls, stress relief, metal finishing, metal shrinking and use of fillers. Emphasizes the identification, handling a replacement of parts such as adjustment and alignment of bolt-on parts, fixed parts and accessories. Training covers the use of adhesives, sound deadeners and welding methods performed during repairs.

### **ACT 151 | STRUCTURAL DAMAGE DIAGNOSIS (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Corequisite: ACT 150.*

Focuses on methods of frame measurement using dimension charts and service manuals. Includes the use of self-centering gauges and mechanical and electronic measuring. Appropriate terms and definitions of vehicle structures and vehicle diagnosis are covered including identification and analysis of damage. Includes the techniques for basic hook ups and safety procedures used in making frames.

### **ACT 152 | STRUCTURAL DAMAGE REPAIR (3)**

**Course Fee: \$165 | Two lecture; two lab**

## Course Descriptions

*Corequisite: ACT 151.*

Continues the study and application of frame measurement and repair. The student applies methods found in dimension charts and service manuals for vehicle diagnosis and straightening. Training includes the replacement of a structural panel with the identification of damaged suspension components replaced according to manufacturer's recommendations.

### **ACT 153 | REFINISHING I (2)**

**Course Fee: \$235 | One lecture; two lab**

*Corequisite: ACT 152.*

Provides the knowledge needed for application and use of automotive paint systems. Course includes locating color codes, mixing formulas, matching and selections of materials. Proper paint gun use and adjustments is taught for the product being applied. In addition, the student practices correct masking and detailing techniques.

### **ACT 160 | FIXED GLASS, PLASTICS AND ADHESIVES (2)**

**Course Fee: \$275 | One lecture; two lab**

Discusses the removal and replacement of fixed glass using manufacturer's specifications, proper tools and recommended materials. Included are procedures on how to work with both state-of-the-art rigid and flexible plastic components using the latest manufacturer's repair techniques. Application of skills in both glass removal and replacement, and repair of plastic components are demonstrated.

### **ACT 205 | ESTIMATING AND SHOP MANAGEMENT (3)**

**Course Fee: \$165 | Three lecture**

*Prerequisite: Successful completion of ACT 110 or permission of academic chair.*

Initiates written estimates on damaged vehicles. Student learn shop management, including: work orders, ordering supplies, operating costs, time cards, shop liabilities, employee's safety and insurance management issues.

### **ACT 211 | MIG WELDING AND CUTTING II (2)**

**Course Fee: \$110 | One lecture; two lab**

*Prerequisite: Successful completion of ACT 111 or permission of academic chair.*

Continues ACT 111 by further analysis of MIG welding procedures including seam weld, stitch welds and destructive testing.

Resistance spot welding, which includes two-sided spot weld, plasma cutting, safety, materials, and equipment and operating procedures, with emphasis on shop safety are also presented.

### **ACT 231 | ADVANCED STRUCTURAL DAMAGE DIAGNOSIS AND REPAIR (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Prerequisite: Successful completion of ACT 211*

Reviews major automotive body repair in vehicles with major damage on conventional structure and unibody structures. The student learns the operation of equipment and techniques used to straighten and align damaged frames. Identification and analysis of frames, hot and cold stress relieving, servicing and sectioning of structural frames. Legal liability issues are also discussed.

### **ACT 237 | AUTOMOTIVE COLLISION TECHNOLOGY LAB (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Prerequisite: Successful completion of ACT 110 or permission of academic chair.*

Applies the didactic knowledge and skills learned from the first year of training. Students will gain valuable practical experience in applying theory and skills in a controlled shop environment.

### **ACT 241 | PAINT DEFECTS -CAUSES AND CURES (3)**

**Course Fee: \$165 | Two lecture; two lab**

*Prerequisite: ACT 237.*

Emphasizes the causes of paint defects and the methods to cure problems during and after refinishing procedures. Students learn to identify the proper surface preparations to apply prior to refinishing. Training includes using paint equipment and determining paint film thickness with proper temperatures for refinishing.

### **ACT 242 | SURFACE PREPARATION II (2)**

**Course Fee: \$110 | One lecture; two lab**

*Prerequisite: Successful completion of ACT 241.*

Emphasizes surface preparation for refinishing including cleaning, sanding, feather edging, chemical treatment of bare metals and priming. The application of primers, including why and where to use them is covered.

### **ACT 243 | REFINISHING II (2)**

**Course Fee: \$235 | One lecture; two lab**

*Corequisite: ACT 242.*

In this advanced course students learn the necessary skills used to tint and blend panels working with the latest finishes and paints. Special coatings and procedures are covered in this course.

### **ACT 244 | FINAL DETAIL (2)**

**Course Fee: \$110 | One lecture; two lab**

*Corequisite: ACT 243.*

Focuses on the detailing procedures in paint refinishing of vehicles. Methods and techniques are specialized to enhance painting skills. Transfers and tapes methods with decals etc., are demonstrated.

## **AUTOMOTIVE SERVICE TECHNOLOGY**

### **ASE 101 | WORKPLACE SKILLS TRAINING (1)**

**One lecture**

Workplace Skills Training is in direct response to industry needs for students to possess the basic skills indicative of certified professionals. The course design encourages students in developing life skills necessary to locate gainful employment in the automotive industry. Instructional focus includes: seeking and applying for employment, preparing resumes, filling out applications, interviewing techniques, attending to personal appearance and communication skills. Furthermore, emphasis is placed upon the skills required to retain industry employment including: punctuality, regular attendance, following directions, general shop practices, productivity, hourly and flat rate compensation, time clock management, problem solving, employee loyalty and responsibility, employee professionalism and good customer service skills.

### **ASE 102 | INTRODUCTORY AUTOMOTIVE TECHNOLOGY (2)**

**One lecture; two lab. Prerequisite:**

*Successful completion of ASE 101 or permission of academic chair.*

Compliments ASE 101 and provides the automotive technology student career information about the automotive service industry. The class will provide theory and related hands-on experience on live vehicles as the foundation for advanced automotive courses. Instructional focus includes: shop safety, common hand tools, basic shop equipment, basic diagnostic equipment, measuring

systems and tools, fasteners, service information, preventive maintenance, tire and wheel assembly service, up-sell theory, basic theories and math, common automotive industry terms and industry standards.

## **ASE 111 | ELECTRICAL/ELECTRONIC SYSTEMS I (2)**

**Course Fee: \$82 | One lecture; two lab**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides instruction in basic electricity and electronic systems required for successful completion of ASE area A6: Electrical/Electronic Systems. Instructional focus includes: electrical principles, basic circuit configuration, Ohm's Law, electrical components, wiring and wiring repairs, common tools and testing equipment, basic testing and problem isolation. The student will work with multi-meters and other electrical test equipment in developing troubleshooting techniques.

## **ASE 112 | ELECTRICAL/ELECTRONIC SYSTEMS II (3)**

**Course Fee: \$123 | Two lecture; two lab**

*Prerequisite: Successful completion of ASE 111 or permission of academic chair.*

Compliments ASE 111 and builds upon basic principles required for successful completion of ASE area A6: Electrical/Electronic Systems by providing additional instruction in electricity and automotive electronic systems. Instructional focus includes: battery theory and operation, starting systems and charging systems. Students continue developing troubleshooting/repair techniques by utilizing structured diagnostic stratagems.

## **ASE 113 | ELECTRICAL/ELECTRONIC SYSTEMS III (2)**

**Course Fee: \$82 | One lecture; two lab**

*Prerequisite: Successful completion of ASE 112 or permission of academic chair.*

Compliments ASE 112 and builds upon learned principles and techniques required for successful completion of ASE area A6: Electrical/Electronic Systems. Instructional focus includes: advanced schematic diagnosis, basic ignition principles, lighting systems, safety systems, basic body electronics and auxiliary systems, body computer parameters, electronic inputs and outputs, multiplexing, vehicle theft systems, electronic instrumentation, sound systems and chassis electronic control systems. Students

continue developing troubleshooting/repair techniques by utilizing structured diagnostic stratagems.

## **ASE 131 | AUTOMOTIVE REFRIGERATION THEORY (2)**

**Two lecture**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides the basic theory, operation, testing and servicing of refrigerant required for successful completion of ASE area A7: Heating and Air Conditioning as well as the Federal Refrigeration Test. Instructional focus includes: safety precautions, environmental concerns, tooling, system identification, principles of refrigeration, states of matter, effects of pressure on gases and vapors, pressure temperature relationships, basic refrigeration cycle, refrigerant types, refrigeration system components and cooling system components. Laboratory work includes proper handling of refrigerants, troubleshooting and basic servicing of these systems utilizing strategy-based diagnostics.

## **ASE 132 | AUTOMOTIVE HVAC SYSTEMS (3)**

**Course Fee: \$123 | One lecture; four lab**

*Prerequisite: Successful completion of ASE 131 or permission of academic chair.*

*Corequisite: Verifiable registration/attempted testing of ASE area A7: Heating and Air Conditioning and successful completion of Federal Refrigeration Test is mandatory. (Requisite is pursuant to Federal Clean Air Act, Section 609.)*

Compliments ASE 131 and builds upon learned principles required for successful completion of ASE area A7: Heating and Air Conditioning as well as the Federal Refrigeration Test. Instructional focus includes: Service information usage, air distribution system components, manual A/C control systems, electronic A/C control systems and rear HTR/A/C control systems. Students continue developing troubleshooting/repair techniques by utilizing structured diagnostic stratagems.

## **ASE 141 | AUTOMOTIVE ENGINES I (3)**

**Course Fee: \$123 | Two lecture; one lab**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides basic engine theory required for successful completion of ASE area A1: Engine Repair. Instructional focus includes:

engine classifications, engine identification, noise diagnosis, lubrication and cooling systems, engine sealing materials, basic blueprinting theory and torque principles.

## **ASE 142 | AUTOMOTIVE ENGINES II (4)**

**Course Fee: \$164 | Three lecture; two lab**

*Prerequisite: Successful completion of ASE 141 or permission of academic chair.*

Compliments ASE 141 and builds upon learned principles required for successful completion of ASE area A1: Engine Repair. Instructional focus includes: recognizing and diagnosing causes of engine failure, engine disassembly, cleaning and inspection, short block procedures, cylinder head procedures, valve trains and modern reassembly procedures. ASE 142 prepares students for ASE area A1 Test: Engine Repair.

## **ASE 151 | AUTOMOTIVE IGNITION SYSTEMS (2)**

**Course Fee: \$82 | One lecture; two lab**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides automotive ignition theory and operation characteristics required for successful completion of ASE area A8: Engine Performance. Instructional focus includes: basic circuitry, ignition components, triggering and switching devices, distributor operation, electronic ignition, system inspection, system troubleshooting and repair. The student will work with multi-meters and other ignition system test equipment while developing troubleshooting/repair techniques by utilizing structured diagnostic stratagems.

## **ASE 152 | INTAKE AND EXHAUST SYSTEMS (2)**

**Course Fee: \$82 | Two lecture**

*Prerequisite: Successful completion of ASE 151 or permission of academic chair.*

Compliments ASE 151 and builds upon learned principles required for successful completion of ASE area A8: Engine Performance. Instructional focus includes: air induction systems, turbo charging theory, supercharging theory, exhaust system components and exhaust system service.

## **ASE 153 | FUEL DELIVERY SYSTEMS I (2)**

**Course Fee: \$82 | One lecture; two lab**

## Course Descriptions

*Prerequisite: Successful completion of ASE 152 or permission of academic chair.*

Compliments ASE 152 and builds upon learned principles required for successful completion of ASE area A8: Engine Performance. Instructional focus includes: fuel performance, air-fuel mixtures, general fuel system diagnosis, fuel tanks, fuel lines and filters, fuel pumps and open/closed loop carburetor theory.

### **ASE 154 | FUEL DELIVERY SYSTEMS II (2)**

**Course Fee: \$82 | Four lab**

*Prerequisite: Successful completion of ASE 153 or permission of academic chair.*

Compliments ASE 153 and builds upon learned principles required for successful completion of ASE area A8: Engine Performance. This is an advanced course in engine drivability and fuel management diagnosis. Instructional focus includes: basic fuel injection theory, throttle body injection, port fuel injection, sequential fuel injection, central port fuel injection, diesel direct injection, common rail systems, injector service, regulation systems and basic fuel management strategies. Students develop troubleshooting/repair techniques by utilizing structured diagnostic stratagems.

### **ASE 255 | EMISSION CONTROL SYSTEMS (1)**

**Course Fee: \$41 | One lecture**

*Prerequisite: Successful completion of ASE 154 or permission of academic chair.*

Compliments ASE 151 and builds upon learned principles required for successful completion of ASE area A8: Engine Performance. Instructional focus includes: pollutant causes, evaporative control systems, EGR system operation, PCV system operation, EFE system operation, AIR system operation, catalytic converter system operation, OVR and advanced OVR system operation. Students develop troubleshooting/repair techniques by utilizing structured diagnostic stratagems.

### **ASE 256 | ON-BOARD DIAGNOSTIC SYSTEMS I (2)**

**Course Fee: \$82 | One lecture; two lab**

*Prerequisite: Successful completion of ASE 255 or permission of academic chair.*

Compliments ASE 255 and builds upon learned principles required for successful completion of ASE area A8: Engine Performance.

Instructional focus includes: OBD-II system standards, system components, system sensors, outputs and actuators, system function, terms, diagnostic scan tools and function testing. Students develop troubleshooting/repair techniques by utilizing structured diagnostic stratagems.

### **ASE 257 | ON-BOARD DIAGNOSTIC SYSTEMS II (2)**

**Course Fee: \$82 | One lecture; two lab**

*Prerequisite: Successful completion of ASE 256 or permission of academic chair.*

Compliments ASE 255 and builds upon learned principles required for successful completion of ASE area A8: Engine Performance. Diagnosis and service of advanced computerized engine control systems (OBD-II) and IM240 testing procedures are the main concepts covered. Instructional focus includes: OBD-II and IM240 system standards, drive cycle requirements, system components, system sensors, outputs and actuators, system functions, terms, diagnostic scan tools and function testing. Students continue developing troubleshooting/repair techniques by utilizing structured diagnostic stratagems. Emphasis is placed upon cylinder misfire diagnostics/service and Enhanced EVAP system concerns.

### **ASE 260 | MANUAL TRANSMISSION SYSTEMS (2)**

**Course Fee: \$82 | One lecture; two lab**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides basic theory required for successful completion of ASE area A3: Manual Drive Train and Axles. Instructional focus includes: clutch operation, clutch diagnosis, clutch maintenance, clutch service, basic gear theory, transmission/transaxle design, shift mechanisms, synchronizer theory, power flow, gear ratios, system electrical, fluid service, disassembly and reassembly procedures. Emphasis is placed upon modern repair/replacement practices.

### **ASE 261 | AUTOMOTIVE DRIVE AXLES AND DIFFERENTIALS (2)**

**One lecture; two lab**

*Prerequisite: Successful completion of ASE 260 or permission of academic chair.*

Compliments ASE 260 and builds upon learned principles required for successful completion of ASE area A3: Manual Drive Train and Axles. Instructional focus

includes: CV Joint identification, CV Joint service, U-Joint identification, U-Joint operation, RWD differentials, differential service, diagnosis and inspection, limited slip differential theory, differential disassembly and reassembly procedures.

### **ASE 262 | NVH THEORY/DIAGNOSTIC STRATEGY (1)**

**One lecture**

*Prerequisite: Successful completion of ASE 261 or permission of academic chair.*

Compliments ASE 261 and is in direct response of industry needs for technicians trained in noise/vibration/harshness diagnosis and repair. Instructional focus includes: vibration theory, vehicle vibration issues, road/service bay testing, EVA diagnosis, vibration software diagnosis and vibration math fundamentals. Students develop troubleshooting/repair techniques by utilizing structured diagnostic stratagems based upon modern NVH procedures.

### **ASE 271 | AUTOMATIC TRANSMISSION SYSTEMS I (3)**

**Course Fee: \$123 | Two lecture; two lab**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides basic theory required for successful completion of ASE area A2: Automatic Transmission along with ATRA areas: Diagnostician, R&R Technician and Rebuilder. Instructional focus includes: transmission identification, hydraulic theory, planetary gear theory and operation, torque converter operation, hydraulic governor operation, friction elements, valve body theory, disassembly procedures, inspection procedures and reassembly procedures. Emphasis is placed upon modern repair practices and warranty service issues.

### **ASE 272 | AUTOMATIC TRANSMISSION SYSTEMS II (2)**

**Course Fee: \$82 | One lecture; two lab**

*Prerequisite: Successful completion of ASE 271 or permission of academic chair.*

Compliments ASE 271 and builds upon learned principles required for successful completion of ASE area A2: Automatic Transmission. Instructional focus includes: systems electrical, electronic governor systems, final drives and differential assemblies, electronic diagnosis, road/service bay testing, current issues, five-speed transmission theory, shifting quality issues, CVT theory, performance enhancements, shift

quality improvements and aftermarket practices. Students develop trouble-shooting/repair techniques by utilizing structured diagnostic stratagems based upon current OEM/aftermarket procedures.

## **ASE 273 | FOUR-WHEEL/ALL-WHEEL DRIVE SYSTEMS (1)**

**One lecture**

*Prerequisite: Successful completion of ASE 272 or permission of academic chair.*

Compliments ASE 272 and builds upon learned principles. Instructional focus includes: four-wheel drive theory, transfer case theory, four-wheel drive operation, all-wheel drive theory, all-wheel drive components and systems, diagnostic procedures, disassembly and reassembly procedures. Emphasis is placed upon modern repair/replacement practices.

## **ASE 281 | BRAKE SYSTEMS I (3)**

**Course Fee: \$125 | Two lecture; two lab**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides basic theory required for successful completion of ASE area A5: Automotive Brakes. Instructional focus includes: principles of hydraulic brake systems, system components, brake system inspection, system hoses and tubing, master cylinder operation, booster systems and operation, brake systems diagnosis, drum brake design and operation, disc brake design and operation, front wheel disc brake components, component inspection and service, all wheel disc brake components, all-wheel disc brake inspection and service, Emphasis is placed on proper service procedures and customer safety/satisfaction.

## **ASE 282 | BRAKE SYSTEMS II (3)**

**Course Fee: \$125 | Two lecture; two lab**

*Prerequisite: Successful completion of ASE 281 or permission of academic chair.*

Compliments ASE 281 and builds upon learned principles required for successful completion of ASE area A5: Automotive Brakes. Instructional focus includes: pulse variation/lateral run-out concerns, antilock brake theory, types of antilock brake systems, antilock components, system electrical/electronics, basic RWAL operation, basic Four-Wheel ABS operation, traction control systems, stability control systems, antilock brake diagnosis and service. Students develop trouble-shooting/repair techniques by

utilizing structured diagnostic stratagems and current industry requirements. Emphasis is placed on proper service procedures and customer safety/satisfaction.

## **ASE 291 | SUSPENSION AND STEERING I (3)**

**Course Fee: \$125 | Two lecture; two lab**

*Prerequisite: Successful completion of ASE 101 and ASE 102.*

Provides basic theory required for successful completion of ASE area A4: Suspension and Steering. Instructional focus includes: suspension system theory, front-suspension components, front-suspension service, rear-suspension components, rear suspension service, electronic steering system theory, system electrical/electronics, steering system theory, manual steering, power steering, steering components, variable effort steering system theory and components and steering system service.

## **ASE 292 | SUSPENSION AND STEERING II (3)**

**Course Fee: \$125 | One lecture; four lab**

*Prerequisite: Successful completion of ASE 291 or permission of academic chair.*

Compliments ASE 291 and builds upon learned principles required for successful completion of ASE area A4: Suspension and Steering. Instructional focus includes: alignment geometry theory, wheel alignment equipment, front-wheel inspection and alignment procedures and four-wheel alignment procedures.

## **BIOLOGY**

### **BIO 100 | BIOLOGY CONCEPTS (4)**

*Transferable Course | Course Fee: \$40*

**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 090.*

A one-semester introductory course for non-majors covering basic principles of biology and methods of scientific inquiry.

### **BIO 160 | ANATOMY AND PHYSIOLOGY OF HUMAN STRUCTURE AND FUNCTION (4)**

**Course Fee: \$40 | Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of TRE 089 and TRM 090.*

Designed for students in allied health

programs such as the practical nursing program, medical assisting and related professions. It will acquaint the student with human anatomy and physiology, structure and function. Course concepts will be organize and presented by organ systems, and the laboratory component of the course will emphasize structure and function of body systems.

### **BIO 181 | GENERAL BIOLOGY (Majors) I (4) BIO 1181**

*Transferable Course | Course Fee: \$40*

**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 091.*

This is the first in a two-course sequence designed for science majors. The course will provide a broad overview of life on earth today and how life has changed over time. The course deals with the basic mechanisms of life-cell structure and function, biochemistry, metabolism, energetics, genetics and evolution. The lab will compliment the lectures.

### **BIO 182 | GENERAL BIOLOGY (Majors) II (4) BIO 1182**

*Transferable Course | Course Fee: \$40*

**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 091.*

Covers the current classification, structure, and life-history of organisms. The structure and function of human organ systems will also be examined in detail. Additionally, the evolutionary forces and ecological stimuli for patterns of adaptation will also be examined. Laboratory experiences will provide students with an appreciation and knowledge of the tremendous diversity seen in the living world.

### **BIO 201 | ANATOMY AND PHYSIOLOGY I (4) BIO 2201**

*Transferable Course | Course Fee: \$40*

**Three lecture; three lab.**

*Prerequisite: One semester of college level biology (BIO 100 or BIO 181) or appropriate score on BIO Competency Exam.*

Study of human anatomy and physiology using a body system approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Topics covered include: ba-

## Course Descriptions

sic anatomical and directional terminology; fundamental concepts and principles of cell biology; histology; the integumentary, skeletal, muscular, and nervous systems; special senses; and the endocrine system.

### **BIO 202 | ANATOMY AND PHYSIOLOGY II (4)** **BIO 2202**

*Transferable Course* | Course Fee: \$40

**Three lecture; three lab.**

*Prerequisite: One semester of college level biology (BIO 100 or BIO 181) or appropriate score on BIO Competency Exam.*

Continuing study of human anatomy and physiology using a body systems approach, with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. The topics covered include: the cardiovascular system; the lymphatic system and immunity; the respiratory system; the gastrointestinal system; the urinary system; fluid/electrolyte and acid/base balance; and the reproductive systems.

### **BIO 205 | MICROBIOLOGY (4)** **BIO 2205**

*Transferable Course* | Course Fee: \$50

**Three lecture; three lab.**

*Prerequisite: Successful completion of BIO 100 or BIO 181 or permission of academic chair.*

A study of the structure, function, and classification of microorganisms and their application to industrial, agricultural, and medical problems.

### **BIO 290 | FIELD BIOLOGY I (1)**

*Transferable Course* | Course Fee: Varies

**Two lab.**

*Prerequisite: Credit or concurrent enrollment in BIO 100 or 181 or permission of academic chair.*

An introduction to biological field studies focusing on the identification of plants and animals and observing them in their natural environments.

### **BIO 291 | FIELD BIOLOGY II (1)**

*Transferable Course* | Course Fee: Varies

**Two lab.**

*Prerequisite: Credit or concurrent enrollment in BIO 100 or 181 or permission of academic chair.*

Introduction to biological assessment of disturbed natural communities. Comparisons will be made between undisturbed natural communities and disturbed communities focusing on diversity and abundance of plant and animal species.

## BUILDING TRADES

### **BTR 100 | BLUEPRINT READING (3)**

**Three lecture**

*Prerequisite: Appropriate assessment score or successful completion of TRE 089.*

Designed to develop the skills and knowledge required to read complete sets of working drawings for residential and light commercial construction projects.

### **BTR 105 | BASIC TRADES SAFETY (3)**

**Three lecture**

*Prerequisite: Appropriate score on Compass of 70 or higher in reading.*

Focuses on safe shop practices and techniques, including OSHA rules and regulations, tools of the trade, use of personal protective equipment, ladder handling, confined spaces, and hazardous conditions. Emphasizes safe work habits, workplace skills and employability skills.

### **BTR 121 | ESTIMATING FOR RESIDENTIAL AND COMMERCIAL BUILDING (3)**

**Three lecture**

Covers techniques of estimating, familiarization with estimation of building construction costs, quantity take-off surveys, lab or productivity rates, local cost factors, overhead and profit, and short- and long-term arrangements.

## BUSINESS

### **BUS 161 | MARKETING (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Analyzes the theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer. Includes the development of a marketing plan.

### **BUS 162 | RETAILING AND CUSTOMER SERVICE (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Explores retail customer service fundamentals. Implementation of relationship marketing through customer analysis,

interpersonal communication, telephone courtesy, sales presentations and after-sales support. Examines the basic principles and techniques of merchandising, operations, layout, store organization, site location, and customer service with an emphasis on retailing operations.

### **BUS 202 | LEGAL ENVIRONMENT OF BUSINESS (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

An examination of how the legal environment impacts the business world and what implications there are for the decision-maker. Included will be coverage of the legal framework, regulations, ethical considerations, and case analysis.

### **BUS 204 | BUSINESS COMMUNICATIONS (3)**

*Transferable Course* | **Three lecture**

*Prerequisites: Successful completion of GBS 105 or ENG 101.*

Develops written and oral communication used in the workplace including preparation of business letters, memorandums, written and oral reports, resumes, and use of relevant communication equipment.

### **BUS 206 | MICROECONOMICS (3)** **ECN 2202**

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Study of interaction of individuals, households, and firms in making production, consumption, and distribution decisions with their attendant social consequences. The relationship of consumer behavior to demand, and firm behavior to supply, in capitalistic and mixed-market systems, is overlaid.

### **BUS 207 | MACROECONOMICS (3)** **ECN 2201**

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Introduction to the economizing problem: unlimited wants with scarce resources; a description of the various sectors of our economy, national income and its determination, monetary and fiscal policies, economic

growth, externalities, international economics and global interdependence.

### **BUS 208 | BUSINESS STATISTICS (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and MAT 151 or permission of academic chair.*

Basic study of business statistics including the collection, tabulation and analysis of business and economic data. Included will be averages, dispersion and statistical decision making, correlations and regression and business forecasting.

### **BUS 221 | FINANCIAL ACCOUNTING (3) ACC 2201**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and ACC 125.*

The study of the principles of accounting in order to develop financial data for partnerships and corporations. The major topics covered include: accounting as an information system; accounting measurement; generally accepted accounting principles (GAAP); professional ethics and the accounting profession; financial reporting, analysis, and performance evaluation; cash flow management; and accounting for short-term financial assets, inventories, current liabilities, long-term assets, long-term liabilities, contributed capital, and long-term investments.

### **BUS 222 | MANAGERIAL ACCOUNTING (3) ACC 2202**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and BUS 221 or permission of academic chair.*

Evaluates accounting information from a managerial perspective. Develops and analyzes accounting information for managerial planning and control. Microsoft Excel or general ledger software will be used in this class.

### **BUS 247 | HUMAN RESOURCE MANAGEMENT (3)**

*Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Compares and contrasts the contemporary

issues, theories and principles used to effectively manage human resources. Topics include recruiting, hiring, compensation and benefits, training and development, employee relations and legal issues.

## **BUSINESS AND ENTREPRENEURSHIP**

### **BUE 101 | INTRODUCTION TO BUSINESS AND ENTREPRENEURSHIP (3)**

*Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

An overview of business principles and leading-edge practices that examines in-depth the major issues in owning a business and that will shape the future of business: entrepreneurship, small business management, business ethics, economics, financial markets, customer satisfaction, quality, career development, global business and the impact of technology.

### **BUE 102 | HUMAN BEHAVIOR IN THE WORKPLACE (3)**

*Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Explores the importance of effective communication in our personal lives, in the world of business and as a business owner-entrepreneur. Students scrutinize practical business applications such as employee motivation, handling customer complaints, and effectively resolving conflict in the workplace.

### **BUE 105 | BUSINESS ENGLISH (3)**

*Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Using examples from business, this course fine-tunes the basic principles of grammar, punctuation, capitalization, number styles, spelling and vocabulary. Emphasis is placed on extensive application of the use of these principles through paragraph, memo, and business letter writing.

### **BUE 110 | BUSINESS MATH (3)**

*Three lecture*

*Prerequisite: Appropriate score on assessment*

*test or successful completion of PCS 021, TRM 090 and TRE 089.*

This course covers the practical application of mathematics through the use of formulas for pricing decisions, interest computations, accounting valuations, currency exchange, metric quantities and elementary descriptive statistics.

### **BUE 120 | MANAGING AND SUPERVISING TECHNIQUES (3)**

*Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Surveys the principles of management. Emphasis on the primary functions of planning, organizing, leading, and controlling with a balance between the behavioral and operational approach. Includes the principles and techniques of supervising and motivating personnel. Focuses on the human interaction in supervision.

### **BUE 130 | FINANCIAL MANAGEMENT FOR ENTREPRENEURS (3)**

*Three lecture*

*Prerequisite: Successful completion of ACC 125.*

Explores sources of money and financing for starting and growing a business including debt and equity. The tools and methods used for making sound business decisions will be examined, including financial products and services available from commercial banks, suppliers and the Small Business Administration.

### **BUE 175 | BUSINESS ETHICS (3)**

*Three lecture*

*Prerequisite: Successful completion of BUE 101.*

This course explores concepts that are relevant to resolving ethical issues in the work place. Students will develop the problem-solving, reasoning and analytical skills needed to make logical decisions. Students will also obtain the skills needed to identify the ethical issues involved in the management of specific problem areas in the workplace.

### **BUE 250 | ENTREPRENEURIAL MANAGEMENT (3)**

*Three lecture*

*Prerequisite: Permission of academic chair.* This is the capstone course and explores the problems involved in establishing, owning,

## Course Descriptions

and improving small business operations and being an entrepreneur. Course topics include marketing to customers, hiring and managing employees, securing financing, monitoring performance, changing location, planning for expansion, and considering a legal form for the business. The value, content, and preparation of the business plan are addressed throughout the course.

### **BUE 260 | GLOBAL MANAGEMENT (3)** Three lecture

*Prerequisite:* Successful completion of BUE 175  
This course explores the concepts of global management, including cultural, religious and political differences and how they pertain to management of these companies.

### **BUE 275 | EFFECTIVE LEADERSHIP FOR ENTREPRENEURS (3)** Three lecture

*Prerequisite:* Successful completion of BUE 120.  
*Corequisite:* BUE 260  
Explores leadership skills of entrepreneurs. Learn concepts for motivating and leading employees in the workplace. Techniques used to improve relationships between supervisors and employees to minimize conflict, improve employee morale and productivity will be examined. The impact of cultural diversity in the workplace will be emphasized throughout the course.

## CHEMICAL DEPENDENCY STUDIES

### **CHD 100 | FOUNDATIONS OF CHEMICAL DEPENDENCY (3)**

*Transferable Course | Three lecture*  
*Prerequisite:* Appropriate score on assessment test or successful completion of TRE 089.  
Introduction to the foundations of the alcohol and drug abuse rehabilitation fields. Emphasis is on the roles and responsibilities of the addiction paraprofessional counselor, ethical issues, pharmacology, family dynamics, dual diagnosis, intervention techniques, self-help groups, levels of care, symptom identification, and conducting alcohol/drug histories. Interactive work stressed.

### **CHD 102 | COMMUNICATION SKILLS IN CHEMICAL DEPENDENCY (3)**

*Transferable Course | Three lecture*  
*Prerequisite:* Appropriate score on assessment

test or successful completion of TRE 089 and CHD 100.

Further examination and refinement of communication and beginning paraprofessional counseling skills as they relate to the chemically dependent client and family members. Emphasis is on practicing the application of these skills in various situations associated with treatment planning. Recordkeeping/documentation skills are emphasized.

### **CHD 110 | BIOLOGICAL SYSTEMS PHARMACOLOGY OF THE CHEMICALLY DEPENDENT (3)**

*Transferable Course | Three lecture*  
*Prerequisite:* Appropriate score on assessment test or successful completion of TRE 089, CHD 100 and PSY 101.

Exploration of the physiological effects of chemical use on human biological systems and human development. Emphasizes human anatomy and physiology, and the identification and management of chemically induced crises situations.

### **CHD 120 | PROFESSIONAL ETHICS IN COUNSELING THE CHEMICALLY DEPENDENT (2)**

*Transferable Course | Two lecture*  
*Prerequisite:* Appropriate score on assessment test or successful completion of TRE 089 and CHD 100.

Exploration of topics relative to the professional and ethical development of the chemical dependency counselor, including manpower utilization, professionalism, and the meeting of individual counselor needs within the field.

### **CHD 150 | PRINCIPLES OF SELF-HELP GROUPS (2)**

*Transferable Course | Two lecture*  
*Prerequisite:* Appropriate score on assessment test or successful completion of TRE 089 and CHD 100.

Overview of the fundamental principles, concepts and historical antecedents of the various self-help groups. Emphasis is on the self-help groups of Alcoholics Anonymous, Al-Anon, Al-Ateen, Narcotics Anonymous, Codependents Anonymous, and Adult Children of Alcoholics.

### **CHD 161 | BEGINNING INTERVIEWING AND DOCUMENTATION SKILLS (3)**

*Transferable Course | Three lecture*  
*Prerequisite:* CHD 100 and CHD 102.

Overview of interviewing/paraprofessional counseling and documentation skills. Recordkeeping/documentation skills. Alcohol and drug abuse paraprofessional counselor core functions emphasized.

### **CHD 165 | THEORY AND TECHNIQUES IN THE TREATMENT OF THE CHEMICALLY DEPENDENT (2)**

*Transferable Course | Two lecture*  
*Prerequisite:* CHD 100

Overview of the 12 Core Functions of the Chemical Dependency Counselor, the two stages of counseling and introduction to counseling theories. Students will be exposed to beginning paraprofessional counseling skills as they apply to the field of chemical dependency therapy.

### **CHD 220 | FAMILY DYNAMICS & CHEMICAL DEPENDENCY (3)**

*Transferable Course | Three lecture*  
*Prerequisite:* Successful completion of ENG 101, CHD 100, CHD 161, CHD 165.

Analysis of the impact of addictions on all the members of a family. Interviewing, assessment and therapeutic approaches particularly useful for these family members presented.

### **CHD 226 | COUNSELING MULTICULTURAL AND DIVERSE POPULATIONS (3)**

*Transferable Course | Three lecture*  
*Prerequisite:* Successful completion of ENG 101, CHD 100, CHD 161, CHD 165, CHD 220

Exploration of implications of chemical use on multicultural and diverse populations. Emphasis is on area influences as well as the impact of paraprofessional relationships.

### **CHD 236 | RECOVERY AND RELAPSE OF THE CHEMICALLY DEPENDENT (2)**

*Transferable Course | Two lecture*  
*Prerequisite:* Successful completion of ENG 101, CHD 100, CHD 161, CHD 165, CHD 220

Introduction to the foundations of alcohol and drug abuse rehabilitation field. Emphasis is on the roles and responsibilities of the addiction paraprofessional counselor, ethical issues, pharmacology, family dynamics, dual diagnosis, intervention techniques, self-help groups, levels of care, symptom identification, and conducting alcohol/drug histories. Interactive work stressed.



## CHD 245 | DUAL DIAGNOSIS (2)

*Transferable Course* | **Two lecture**

*Prerequisite: Successful completion of or concurrent enrollment in CHD 100.*

This course explores concepts, definitions, and features of co-occurring mental disorders and substance-related disorders from a bio-psycho-social model. Addresses the intake process, diagnosis, counseling, treatment planning and integrated treatment as part of service coordination to dual-diagnosed clients.

## CHD 250 | GROUP INTERVENTION WITH THE CHEMICALLY DEPENDENT (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of ENG 101, CHD 100, CHD 102, CHD 150, CHD 161, CHD 165*

Focus on group dynamics and group process as they relate to chemical dependency. Exploration of group developmental stages, family intervention models, various counseling approaches/techniques and their applications to therapeutic, education and family groups.

## CHD 275 | ADVANCED THEORY AND TECHNIQUES IN THE TREATMENT OF THE CHEMICALLY DEPENDENT (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of CHD 100 and CHD 165*

Capstone course for Chemical Dependency Studies program. Focus is on chemical dependency counseling theories and techniques used by chemical dependency paraprofessionals as they relate to the client and family members throughout the treatment process. Emphasis is on critical thinking in application of counseling models.

## CHD 280 | CHEMICAL DEPENDENCY PRACTICUM (6)

*Transferable Course* | **Twelve lab.**

*Prerequisite: Successful completion of ENG 101, PSY 101, CHD 100, CHD 110, CHD 120, CHD 150, CHD 161, CHD 165, CHD 220, CHD 226, CHD 245, CHD 250*

*Corequisite: CHD 275*

Opportunity for advanced student to use his/her developed knowledge and skills in an applied setting with supervision.

## CHEMISTRY

### CHM 130 | FUNDAMENTAL CHEMISTRY (4) CHM 1151

*Transferable Course* | **Course Fee: \$40**

**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRM 091 and TRE 089.*

Fundamental chemistry covers principles of inorganic chemistry designed for programs requiring a year or less of chemistry, and for students proceeding on to one semester of organic chemistry.

### CHM 140 | FUNDAMENTAL ORGANIC AND BIOCHEMISTRY (4)

**Course Fee: \$50** | **Three lecture; three lab.**

*Prerequisite: Successful completion of CHM 130. Continuation of CHM 130.*

Emphasizes the importance of organic chemistry as the basis for the study of some important life processes. Includes the classification, structure and general chemical behavior of organic and biochemical compounds and systems.

### CHM 151 | GENERAL CHEMISTRY I (4) CHM 1151

*Transferable Course* | **Course Fee: \$40**

**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and MAT 121.*

Principles of inorganic chemistry, including molecules and ions, chemical reactions, thermochemistry, quantum theory and the periodic table, chemical bonding, proper use of lab equipment, and the use and application of the scientific method. This course is appropriate for students majoring in science and other programs requiring more than one year of chemistry.

### CHM 152 | GENERAL CHEMISTRY II (4) CHM 1152

*Transferable Course* | **Course Fee: \$40**

**Three lecture; three lab.**

*Prerequisite: Successful completion of CHM 151.*

A continuation of the study of inorganic chemistry begun in CHM 151.

### CHM 235 | GENERAL ORGANIC CHEMISTRY I (4) CHM 2235

*Transferable Course* | **Course Fee: \$50**

**Three lecture; three lab.**

*Prerequisite: Successful completion of CHM 152.*

Studies the properties and reactions of aliphatic and aromatic organic with emphasis being placed on reaction mechanism, fundamental principles, and modern instrumental methods.

### CHM 236 | GENERAL ORGANIC CHEMISTRY II (4) CHM 2236

*Transferable Course* | **Course Fee: \$50**

**Three lecture; three lab.**

*Prerequisite: Successful completion of CHM 235.*

A continuation of the study of organic chemistry begun in CHM 235.

## CHILD DEVELOPMENT ASSOCIATE PATHWAY

### CDA 101A SAFETY, HEALTH AND NUTRITION (1)

**One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course provides an introduction to the study of comprehensive health, mental health, safety, and nutrition in early childhood group settings, including regulatory guidelines. The focus is on applying practical guidelines to create and to maintain a healthy and safe environment for children. This includes assessing each child's health status, studying nutritional needs of children, learning communicable disease prevention, designing emergency and evacuation plans, and making a risk analysis, as well as current topics, resources, and cutting edge practices.

### CDA 101B | A LEARNING ENVIRONMENT IN EARLY CHILDHOOD (1)

**One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course is an introduction to the theories and principles for arranging effective indoor and outdoor learning environments in early childhood settings. Emphasis is on how to analyze spaces, design and maintain well-organized learning places, which stimulate optimal cognitive, social, and physical development in attractive learning centers with age-appropriate equipment and materials providing high quality early childhood education.

## Course Descriptions

### **CDA 101C | PRINCIPLES OF CHILD DEVELOPMENT AND CURRICULUM (1)**

#### **One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course provides a basic overview of theories, research and trends in human development from prenatal to age 5, and application of the fundamental principles of child development to effectively design and implement curriculum which promotes development of the whole child. Introduction to methods and materials to assist young children in the learning process with an emphasis on the arts, movement, dramatic play, technology, and sensory activities, all within the context of creativity, observation, and developmentally appropriate activities. An overview of assessment strategies used to support children's learning are explored.

### **CDA 102A | PHYSICAL DEVELOPMENT (1)**

#### **One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course focuses on issues of physical fitness and well-being in young children which support the child's right to play and learn in an inclusive environment. Best practice activities will be addressed which develop large and small motor skills and the five senses.

### **CDA 102B | INTELLECTUAL DEVELOPMENT (1)**

#### **One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course is an overview on the intellectual development of children 0-5 by investigating theories, trends, and principles of cognitive growth. Focus on activities to strengthen children's early literacy skills such as the use of spoken language, listening skills, and increasing vocabulary.

### **CDA 102C | SOCIAL, EMOTIONAL AND SELF-CONCEPT DEVELOPMENT (1)**

#### **One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course provides an overview of social, emotional, and self-concept theory which impacts children's lives in an early child-

hood educational setting. Developmentally - appropriate activities and experiences which provide children opportunities to develop a healthy self-concept, an emotional IQ, and social competency within a group will be a focus of this class.

### **CDA 103A | OBSERVATION, BEHAVIOR AND GUIDANCE (1)**

#### **One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

An introductory course which explores the research and techniques for guiding children in early childhood education with a focus on individual child and adult needs for a disciplined environment. Areas of focus are objective observation and record keeping techniques, guidance, behavior modification techniques, listening skills, and classroom management. Meaningful two-way communication is emphasized. Provides an environment in which children can learn and practice behaviors which are appropriate and acceptable individually and in a group.

### **CDA 103B | UNDERSTANDING FAMILIES & COMMUNITIES (1)**

#### **One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course provides an overview within the field of family life education. Emphasis is on developing flexible, culturally sensitive, and effective communication skills to ensure each child's culture, language, ethnicity, and family structure is recognized and valued. It examines barriers which limit fathers' involvement and identifies strategies to enhance fathers' involvement with their children. Students will learn techniques such as assertiveness training and problem-solving to use when holding parent conferences, community meetings and making home visits to strengthen and to involve parents and the community in the early childhood program.

### **CDA 103C | PROGRAM OPERATION AND PROFESSIONALISM (1)**

#### **One lecture**

*Prerequisite: Appropriate score on assessment or successful completion of PCS 021.*

This course addresses professionalism in the early childhood field, including a history of the profession, ethical behavior, advocacy

for improved programs and services for children and their families, and a commitment to professional growth. It also addresses the philosophy of child care services including the standards set by the National Council for Professional Recognition, the Association for Child Development, and the National Association for the Education of Young Children. Students are encouraged to apply to and to complete final requirements for the CDA credential.

## COMMUNICATION

### **COM 121 | INTERPERSONAL COMMUNICATION (3)**

#### *Transferable Course* | **Three lecture**

Emphasizes the development of effective interpersonal communication skills significant to both personal and career success. Students will explore basic elements of interpersonal communication, including self-concept, perception, listening, verbal and non-verbal expression, emotional expression, critical thinking, conversational skills, personal relationships, intercultural communication, conflict resolution and personal power. Students evaluate their present communication styles and increase competency in communicating successfully with others.

### **COM 151 | PUBLIC SPEAKING (3)**

#### *Transferable Course* | **Three lecture**

*Prerequisite: Appropriate assessment test score or successful completion of PCS 021 and TRE 089.*

Emphasizes communication clearly and effectively before a group through the study of communication theory and through extensive practice speaking.

## COMPUTER INFORMATION SYSTEMS

### **CIS 105 | COMPUTERS FOR BEGINNERS (3)**

#### **Three lecture**

Designed for the beginning computer user to learn introductory concepts and how to use an operating system, process text and navigate the Internet.

### **CIS 110 | INTRODUCTION TO COMPUTER INFORMATION SYSTEMS (3)**

#### *Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

An introduction to hardware, software, data structures, information systems analysis, and other topics regarding computer information systems. Content covers historical and contemporary topics with emphasis on database and spreadsheet packages for problem solving from a business perspective.

**CIS 115 | A+ COMPUTER TECHNOLOGY HARDWARE (3)**

**Three lecture**

Prepares students to maintain personal computers. Part of a two-course series that prepares students to take the CompTIA A+ certification exams. CIS 115 emphasizes the hardware area and can be taken concurrently with CIS 116.

**CIS 116 | A+ COMPUTER TECHNOLOGY SOFTWARE (3)**

**Three lecture**

Prepares students to maintain personal computers. Part of a two-course series that prepares students to take the CompTIA A+ certification exams. CIS 116 emphasizes the software area and can be taken concurrently with CIS 115.

**CIS 120 | INTRODUCTION TO PROGRAMMING (3)**

**Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 090*

This course takes an in depth look at programming concepts and techniques through the Java programming language. Theoretical concepts along with practical hands-on projects will be used when examining object oriented programming techniques. This course will explore the advancement of program development, and problem solving strategies.

**CIS 125 | BASIC GAME DESIGN AND CREATION (3)**

**Three lecture**

Provides students with an introduction to game design and development. Topics include creating objects, events, and multiple levels of game interaction.

**CIS 131 | MICROSOFT OFFICE (3)**

**Three lecture**

This course presents the fundamental skills of Word, Excel, Access, and PowerPoint. Provides students with exposure to applying the Microsoft Office components to real business situations, including the integration of the applications in order to solve business problems.

**CIS 135 | MICROSOFT ACCESS DATABASE (3)**

**Three lecture**

Learn to use Access for database design and management. This course prepares students to take the MCAS (Microsoft Certified Application Specialist) Access Exam.

**CIS 136 | MICROSOFT EXCEL SPREADSHEETS (3)**

**Three lecture**

Learn to use Excel to manage financial calculations, as well as to work with formulas, charts and graphics to develop a professional worksheet. This course prepares students to take the MCAS (Microsoft Certified Application Specialist) Exams.

**CIS 138 | MICROSOFT WORD (3)**

**Three lecture**

Learn to format, print, and streamline your word processing tasks with Microsoft Word. This course prepares the students to take the MCAS (Microsoft Certified Application Specialist) Exams.

**CIS 140 | INDESIGN DESKTOP PUBLISHING (3)**

**Three lecture**

Provides the techniques and information necessary to create text and graphic materials suitable for desktop publishing projects using Adobe InDesign.

**CIS 141 | MICROSOFT POWERPOINT PRESENTATIONS (3)**

*Transferable Course* | **Three lecture**

This course is an introduction to using multimedia presentation software. PowerPoint allows the user to create digital presentations that include graphics, animation, sounds and videos. This course also prepares students to take the MCAS (Microsoft Certified Application Specialist) Exam.

**CIS 143 | WEB PAGE DESIGN I (3)**

*Transferable Course* | **Three lecture**

This class teaches Web page design techniques using the Adobe Dreamweaver edit-

ing software to create Web sites that include hyperlinks, graphics and text. Design issues such as creating successful Web pages for target audiences and search engine placement are also included in this course.

**CIS 145 | PHOTOSHOP I (3)**

*Transferable Course* | **Three lecture**

A beginning course in learning the fundamental concepts and features of image manipulation using the most popular program in the industry.

**CIS 153 | NETWORKING ESSENTIALS (3)**

**Three lecture**

Provides the basic building blocks of networks and gives students experience in planning and using them to create a network.

**CIS 156 | FIREWALLS AND INTRUSION DETECTION (3)**

**Three lecture**

*Prerequisite: Successful completion of CIS 153 or permission of academic chair or program director.*

Designed for the student who needs to learn the basics of network firewall security to prevent intrusion and destruction of computerized information.

**CIS 200 | PROGRAMMING AND GAME DEVELOPMENT WITH VISUAL BASIC.NET (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of CIS 120 or permission of academic chair or program director.*

Presents programming and game development concepts using Microsoft's Visual Basic.NET programming.

**CIS 204 | PROGRAMMING AND GAME DEVELOPMENT IN C++ (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of CIS 120 or permission of academic chair or program director.*

Presents programming and game development concepts using the C++ programming language.

**CIS 206 | PROGRAMMING FOR THE WEB IN JAVASCRIPT (3)**

**Three lecture**

Prerequisite: Successful completion of CIS

## Course Descriptions

120 and 143 or permission of academic chair or program director.  
Presents fundamental concepts in JavaScript programming for Web page applications.

### **CIS 208 | PROGRAMMING IN C# (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of CIS 120 or permission of academic chair or program director.* Uses C#, an object-oriented programming language, to create projects using structured programming, function calling and parameter passing concepts.

### **CIS 210 | DATABASE MANAGEMENT AND SQL DESIGN (3)**

**Three lecture**

*Prerequisite: Successful completion of CIS 110 and CIS 120*

This course is intended to provide students with an introduction to database management and beginning SQL concepts, and database design methodology.

### **CIS 241 | E-COMMERCE TECHNOLOGY (3)**

**Three lecture**

*Prerequisites: Successful completion of CIS 143.* This course addresses the key elements involved in Web-based transactions including designing and securing your online site through Web technology concepts.

### **CIS 243 | WEB PAGE DESIGN II (3)**

**Three lecture**

*Prerequisite: Successful completion of CIS 143 or permission of academic chair or program director.*

This course includes the essential concepts of HTML, XHTML, and an introduction to XML and JavaScript. Projects consist of coding Web pages with special effects, windows and frames.

### **CIS 245 | PHOTOSHOP II (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of CIS 145 or permission of academic chair or program director.*

An advanced course in enhancing the concepts and features of image manipulation using the most popular program in the industry.

### **CIS 253 | NETWORK SECURITY (3)**

**Three lecture**

*Prerequisite: Successful completion of CIS 153*

*or permission of academic chair or program director.*

Takes a comprehensive look at network security and provides students with the tools and techniques necessary to safeguard computer stored data.

### **CIS 261 | COMPUTER SUPPORT SERVICES (3)**

**Three lecture**

*Prerequisite: Successful completion of CIS 110 or permission of academic chair or program director.*

Presents help desk operations and general troubleshooting techniques for technical support personnel.

### **CIS 270 | SYSTEMS ANALYSIS AND DESIGN (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of CIS 110 or permission of academic chair or program director.*

Focuses on the systems development life cycle. Systems are traced from initial investigation and feasibility studies through detailed analysis, software selection and/or programming, staff training, project implementation and review. The purpose is to develop system solutions in a complete business/management environment.

### **CIS 280 | CIS INTERNSHIP (1-3)**

*Transferable Course* | **One to Three lecture**

*Prerequisite: Permission of academic chair or program director.*

The internship provides the student with the opportunity to gain practical work experience by working for a local employer. An internship requires at least 30 clock hours of work for each credit.

## **CULINARY ARTS**

### **CUL 111 | INTRODUCTION TO CULINARY (4)**

**Course Fee: \$705** | **Three lecture; two lab.**

*Corequisite: CUL 115*

Students are introduced to the fundamental concepts, skills and techniques involved in professional cooking. Special emphasis is placed on classical theories, knife skills, safety, culinary math, interviewing and resumes, sanitation, mise en place, cooking techniques, and stocks, soups and sauces.

### **CUL 112 | TECHNIQUES OF HEALTHY COOKING (4)**

**Course Fee: \$340** | **Three lecture; two lab**

*Corequisites: CUL 111 and CUL 115*

The causes and effects of nutrition and dietary practices are presented to include the composition of foods, labeling, additives, special diets, RDA, BMI, and TEU. The interrelationship between nutrition, bodily systems, global foodways, food safety and environmental challenges are explored and analyzed. The practical portion of the course will explore the procurement, planning and preparation of healthy cuisine including vegetarian, cooking with healthy ingredients, recipes and menus, soups and salads, main dishes, side dishes, breakfast and beverages, baked goods and desserts and chef's pantry.

### **CUL 113 | SAUCIER (4)**

**Course Fee: \$340** | **Three lecture; two lab**

*Corequisites: CUL 111 and CUL 115*

The student will be immersed in the culinary fundamental skill set of the saucier, (master of stocks, soups and sauces). The stocks covered will be brown, white, vegetable, fish fumet, shellfish. The soups covered will be cream, puree, broth, consomme, specialty and national. The sauces covered will be the "mother sauces," derivative sauces and cold and dessert sauces. Additionally, the various thickening mixtures will be covered and utilized. Finally, students will be instructed on the proper use of convenience products such as stocks, soups and sauces.

### **CUL 114 | BAKING (4)**

**Course Fee: \$340** | **Three lecture; two lab**

*Corequisites: CUL 111 and CUL 115*

Students cover the fundamental concepts, skills and techniques involved in the art and science of baking. Focus is placed on accurate measurement, weighing, mixing, baking, and finishing baked goods. Quick breads, yeast breads, cookies, cakes, laminate doughs, puddings, pastry creams, frozen desserts, dessert sauces and restaurant desserts are produced. The process of ordering, planning, sanitation and marketing of commercial restaurant and/or hotel bake-shop are covered.

### **CUL 115 | SANITATION AND SAFETY (3)**

**Course Fee: \$40** | **Three lecture**

*Corequisite: CUL 111*

The sanitation and safety course covers the causes and effects of food-borne illness and food spoilage. The sanitation and personal hygiene principles, laws and regulations will be dealt with in a systematic, holistic environment. The Hazard Analysis Critical Control Point, HAPPC, is a method that ensures safe food throughout the flow of the food in an operation.

### **CUL 116 | SUPERVISORY MANAGEMENT (3)**

**Course Fee: \$40 | Three lecture**

*Prerequisites: CUL 111 and CUL 115*

This course gives the student a general overview of the human resource function in the culinary world. Leadership, motivation, chain of command, span of control and other administrative functions are covered. The HR process is covered from recruitment, interviewing, selection, orientation, training, supervision, evaluation, progressive discipline and career development and advancement. The legal HR environment is covered including EEOC, sexual harassment, age, gender, ethnicity and culture.

### **CUL 117 | PURCHASING AND RECEIVING (3)**

**Course Fee: \$40 | Three lecture**

*Prerequisites: CUL 111 and CUL 115*

Student will be introduced to the concepts of selection and procurement, buyer relations, ordering and receiving as it pertains to the food service business. The food categories covered will be groceries, fruit and vegetables, meat, fish, seafood and cleaning products. Inventory control via perpetual or periodic methods, depreciation schedules and cash flow management are also covered.

### **CUL 118 | HOSPITALITY AND CULINARY MARKETING (3)**

**Course Fee: \$40 | Three lecture**

*Prerequisites: CUL 111 and CUL 115*

Marketing for Hospitality and Culinary will explore marketing as it relates to the multi-billion dollar hospitality industry. The five P's of marketing will be covered and related to hospitality and culinary. The marketing process, opportunities, strategies, MIX, and management will be key learning modules. The specific hospitality segments of lodging, foodservice, travel and tourism, gaming and ecotourism will be covered in terms of marketing and public relations.

### **CUL 119 | EXTERNSHIP (3)**

**Six lab.**

*Prerequisites: Completion of all culinary courses required for the culinary certificate.*

This course is designed to afford the student an opportunity to garner real-world experience in the food service/hospitality industry. Students will apply their practical and theoretical knowledge of the food service environment, including food preparation, budgeting and professionalism to their externship position. The externship will be set up on a case-by-case basis with consultation between the instructor, student, and employer.

### **CUL 211 | FOOD AND BEVERAGE COST CONTROL (3)**

**Course Fee: \$40 | Three lecture**

*Prerequisites: CUL 111 and CUL 115*

This course is designed to prepare students to plan, prepare, understand, interpret, organize, analyze and evaluate the financial management functions of foodservice firms. Four key areas are covered: terms, the four step control process, the food control process and labor control.

### **CUL 212 | AMERICAN REGIONAL CUISINE (4)**

**Course Fee: \$340 | Three lecture; two lab**

*Prerequisites: CUL 111 and CUL 115*

This course is designed to be a capstone course that brings together the culinary and academic training that was presented in the basic culinary curriculum. Students will utilize their previously acquired component skills and training from a macro-perspective to different cuisines. In this course the tapestry that makes-up American cuisine is presented in a protocol that focuses on food, culture, topography, history, trends, and multiple influences on the foodways and culture of America.

### **CUL 213 | INTERNATIONAL CUISINE (4)**

**Course Fee: \$340 | Three lecture; two lab**

*Prerequisites: CUL 111 and CUL 115*

This course is designed to explore the foodways of Europe and Asia. The history, topography, religions and indigenous ingredients of Europe and Asia are covered in a protocol that focuses on food, foodways, trends and how these cultures/cuisines influence the foodways and culture of America.

### **CUL 214 | HOSPITALITY AND CULINARY LAW (3)**

**Course Fee: \$40 | Three lecture; two lab**

*Prerequisites: CUL 111 and CUL 115*

A comprehensive overview of the laws and regulatory agencies governing the lodging, gaming, foodservice and travel industries. The historical development of innkeeper laws, guests' rights, food and beverage liability, employment laws, EEOC, sexual harassment, ADA, dram shop and the responsible service of alcohol and food borne illness issues.

### **CUL 215 | ARTISAN BREADS (4)**

**Course Fee: \$340 | Three lecture; two lab**

*Prerequisites: CUL 111, CUL 114, CUL 115*

This course is designed to enable students to progress from basic baking to the expert baking of specialty, decorative and artisan bread making. Breads made with yeasted pre-ferments, levain, sourdough, straight-dough, decorative breads will be covered. The traditional artisan techniques will be the focus of this course. Additionally, students will learn the retail and wholesale production, marketing and quality controls in bread making.

### **CUL 216 | ADVANCED BAKING AND PASTRY (4)**

**Course Fee: \$340 | Three lecture; two lab**

*Prerequisites: CUL 111, CUL 114, CUL 115*

This course is designed to build on the basic baking course. The students will learn advanced techniques in the baking and pastry arts. Specific attention will be given to laminate doughs, individual pastries, cake decorating, chocolate, confections, sugar work and restaurant desserts.

### **CUL 217 CHOCOLATE, CONFECTIONS, SUGAR WORK AND RESTAURANT DESSERTS (4)**

**Course Fee: \$340 | Three lecture; two lab**

*Prerequisites: CUL 111, CUL 114, CUL 115*

This is an advanced baking & pastry course which focuses primarily on chocolate and working with chocolate in professional baking and pastry. Additionally, confections, sugar work, and restaurant desserts are covered. This is a challenging course that will prepare students for work in a professional bakery in a hotel, restaurant or resort setting.

## Course Descriptions

### DENTAL ASSISTING

#### DAE 101 | BIOMEDICAL DENTAL SCIENCES (3)

##### Three lecture

*Prerequisite: Appropriate score on the assessment test or completion of PCS 021, TRE 089 and TRM 090.*

Introduction to bio-sciences as they are related to the oral cavity. Includes anatomy and physiology, tooth morphology, oral pathology and nutrition, each of which affect total dental health.

#### DAE 105 | DENTAL INFECTION CONTROL (1)

##### One lecture | Course Fee: \$50

*Prerequisite: Appropriate score on the assessment test or completion of PCS 021, TRE 089 and TRM 090.*

Infection control procedures in a dental setting are emphasized. Microbiology, disease transmission, waste management and regulatory agencies will be examined in this context.

#### DAE 106 | DENTAL ASSISTANT RADIOGRAPHY (3)

##### Course Fee: \$390 | Two lecture; two lab

*Prerequisite: DAE 105*

Course includes exposure, processing, mounting and evaluation of radiographs. Radiographic principles, landmarks and restorations are covered. Preparation for the Dental Assisting National Board Radiation Health and Safety exam and the Arizona Clinical Radiologic Proficiency exam are emphasized.

#### DAE 107 | DENTAL ASSISTING I (2)

##### Course Fee: \$150

##### One and one half lecture; one lab

*Prerequisite: Appropriate score on the assessment test or completion of PCS 021, TRE 089 and TRM 090.*

An introduction to the career of dental assisting. Topics examined include the patient record, vital signs and preventative dentistry.

#### DAE 108 | DENTAL ASSISTING II (3)

##### Course Fee: \$150 | Two lecture; two lab

*Prerequisite: Successful completion of DAE 105 and DAE 107 (formerly DAE 10*

*10)* Presents fundamental skills for clinical dental assisting. Emphasized are the role of the dental assistant is patient procedures and patient management.

#### DAE 109 | DENTAL ASSISTING MATERIALS (3)

##### Course Fee: \$175 | One lecture; four lab

*Prerequisite: DAE 105*

*Corequisite: DAE 109L.*

Identification and description of dental materials. Manipulation of restorative, impression, laboratory and adjunct dental materials are emphasized.

#### DAE 114 | CLINICAL PROCEDURES (7)

##### One half lecture; 13 lab.

*Prerequisite: Dental Program Director approval*

Students have externships in assigned dental practices in the community. Students integrate with the dental staff as contributing members of the dental team.

#### DAE 115 | OFFICE MANAGEMENT FOR THE DENTAL ASSISTANT (1)

##### One lecture

*Prerequisite: Appropriate score on the assessment test or completion of PCS 021, TRE 089 and TRM 090.*

A study of the basic business administration procedures in dentistry is emphasized. Job search skills including resumes and interviews will also be covered.

#### DAE 120 | DENTAL SPECIALTIES (3)

##### Course Fee: \$200; Two lecture; two lab

*Prerequisite: Successful completion of DAE 108*

*Corequisite: DAE 120L*

Specialty and expanded skills for the clinical dental assistant including prosthetics, orthodontics and surgical procedures are emphasized.

### DENTAL HYGIENE

#### DEH 100 | CURRENT ISSUES AND ETHICS IN DENTAL HYGIENE (1)

##### One lecture

*Prerequisite: Admission to Dental Hygiene Program.*

Discusses current issues in dental hygiene and heightens student's awareness of ethical issues and choices for action. Also includes an orientation to dentistry, a library project and an opportunity to facilitate discussion.

#### DEH 101 | PRE-CLINICAL DENTAL HYGIENE (5)

##### Two lecture; six lab

*Prerequisite: Admission to Dental Hygiene Program.*

*Co-requisite: DEH 101L*

Includes basic dental hygiene theory and development of basic clinical skills. Lectures, demonstrations, and laboratory experiences are related to dental hygiene patient treatment, including aseptic techniques and practices; patient assessment and principles of instrumentation.

#### DEH 102 | CLINIC I (6)

##### Two lecture; eight lab.

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

*Co-requisite: DEH 102L*

The focus of this course is prevention by way of patient education. Also included are continued dental hygiene clinical procedures, such as sealants, coronal polish, fluoride and an introduction to treatment planning.

#### DEH 106 | DENTAL RADIOGRAPHY (3)

##### Two lecture; two lab.

*Prerequisite: Admission to Dental Hygiene Program.*

Introduction to principles of X-radiation production and safety factors; application and theory of properly exposing, processing, mounting and evaluating dental radiographs; identification of normal anatomic landmarks and pathologic conditions. Utilization of the laboratory in performing procedures necessary to produce quality radiographs.

#### DEH 111 | PERIODONTOLOGY I (3)

##### Three lecture

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

Introduction to principles of periodontology and periodontal medicine, exhibited by describing and recognizing the periodontium in health and disease. Anatomy, physiology, histology and functions of dental tissues are discussed in depth. Periodontal diseases are discussed and classified, the etiology of periodontal diseases is explored, and particular emphasis is placed on the host immune response, effects of systemic conditions on the periodontium, and the effects periodontal disease has on systemic health.

#### DEH 117 | APPLIED PHARMACOLOGY (3)

##### Three lecture

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

This course covers general pharmacology

including the study of drug groups, dosages, administration, and reaction of drugs common to dental patients.

## **DEH 118 | ANESTHESIOLOGY (3)**

**Two lecture; two lab.**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

Covers neurophysiology and pharmacology of local anesthetic agents. Mastery of the armamentarium and techniques of regional anesthesia in dentistry is emphasized. The concepts, principles and administration of nitrous oxide-oxygen sedation are also covered. Prevention and treatment of anesthetic complications are reviewed and practiced.

## **DEH 121 | DENTAL ANATOMY (3)**

**Two lecture; two lab.**

*Prerequisite: Admission to Dental Hygiene Program.*

*Co-requisite: DEH 121 L*

Introduction to principles of dental anatomy, oral embryology, and histology, functional characteristics of human deciduous, mixed, and permanent dentitions; and related oral structure. Accomplished by participation in classroom activities, and laboratory assignments.

## **DEH 122 | HEAD AND NECK ANATOMY (2)**

**One and one-half lecture; and one lab.**

*Prerequisite: Acceptance into the Dental Hygiene program.*

*Co-requisite: DEH 122L*

A study of the anatomical structures of the head and neck, with emphasis on the nerve and vascular supply, muscles of mastication, bones of the skull, and the oral cavity.

## **DEH 201 | CLINIC II (5)**

**Two lecture | six lab.**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

*Co-requisite: DEH 201L*

Advanced instrumentation techniques are introduced in conjunction with treatment of the periodontal patient. Care for the special needs patient is introduced.

## **DEH 202 | CLINIC III (9)**

**Two lecture; fourteen lab.**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

*Co-requisite: DEH 202L*

Emphasizes the care of the special needs

patient. Advanced clinical skills and patient management are presented and performed through comprehensive treatment planning and patient care. Students will prepare a presentation relating to the care of the special needs patient at the end of the course.

## **DEH 203 | PRACTICE MANAGEMENT (9)**

**Two lecture; fourteen lab.**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

Designed to involve the student in research, presentation, and discussion regarding legal and ethical considerations of patient care; resumes, cover letters, job search and interview skills; roles, relationships, and requirements of the dental hygiene professional; organization and management of dental hygiene practice. In addition, state dental practice acts; licensure and credentialing, and various aspects of employment will be addressed.

## **DEH 208 | DENTAL MATERIALS (2)**

**One lecture; two lab**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

Introduction to principles of the physical and chemical properties and proper manipulation of dental materials utilized by dentists and their auxiliaries.

## **DEH 212 | PERIODONTOLOGY II (2)**

**Two lecture**

*Prerequisite: Appropriate standing in Dental Hygiene Program and DEH 111*

Designed to teach the dental hygiene student how to relate the biological rationale for various treatment procedures to the conceptual understanding of the various periodontal disease processes; how to collect pertinent data, analyze it, and then develop a treatment plan and appropriate therapy for individual periodontal patients. Also helps student to understand both non-surgical and surgical rationale, therapy, and techniques involved.

## **DEH 223 | GENERAL AND ORAL PATHOLOGY (3)**

**Three lecture**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

This course is the study of general and oral pathological processes. Topics include pathological diagnostic criteria, inflamma-

tion and repair with associated oral manifestations, immunity, autoimmunity and infectious diseases. Other topics include genetics, developmental disorders, neoplasia, nonneoplastic diseases of bone, oral manifestation of oral diseases and diseases of the TMJ.

## **DEH 235 | ORAL HEALTH PROMOTION/DISEASE PREVENTION (2)**

**Two lecture**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

Topics related to oral health promotion and disease prevention are taught. Particular emphasis is placed on the relationship of nutrition and advanced oral hygiene aids and techniques to oral health; the nutritional and oral hygiene needs of special population groups; nutritional assessment and counseling; the effects of nutrition and oral self-care habits on the decay process and other oral diseases; and the roles and relationships of the healthcare provider and the healthcare consumer in accomplishing behavioral change.

## **DEH 243 | COMMUNITY DENTAL HEALTH (3)**

**Two lecture; two lab.**

*Prerequisite: Appropriate standing in Dental Hygiene Program.*

Concepts of preventive dentistry, health education, and dental public health applied to current problems affecting the dental health of the community. Practical experience through participation in community dental health projects.

## **DRAFTING**

### **DFT 100 | TECHNICAL SKETCHING/DRAWING (3)**

**Three lecture**

*Prerequisite: Appropriate score on the assessment test or successful completion of PCS 021 and TRE 089.*

Covers the basic skills needed to transfer initial design ideas to paper, including the ability to sketch quickly and accurately, and compile into a formal drawing. Learners will practice freehand sketching, lettering, and isometric sketching. The use of grid and isometric papers will be demonstrated and practiced. Reading and interpreting sketches and drawings will be emphasized.

## Course Descriptions

### EARLY CHILDHOOD EDUCATION

#### ECE 271 CURRICULUM AND EXPERIENCES IN ECE (3)

Three lecture

*Prerequisite:* Successful completion of TRE 089 and PCS 021 or appropriate score on assessment test.

Designed to help students understand the importance of early childhood curriculum and become energetic, creative and adaptive early childhood teachers in a dynamic educational environment. Special emphasis will be placed on developmental and age appropriate curriculum planning and instruction utilizing theory and hands-on interactive applications.

#### ECE 272 | CLASSROOM MANAGEMENT (3)

Three lecture

*Prerequisite:* Successful completion of TRE 089 and PCS 021 or appropriate score on assessment test.

Designed to help students create a classroom management system using positive, age appropriate modeling allowing for cultural, developmental and individual differences.

#### ECE 273 | PLAY EDUCATION (3)

*Transferable Course* | Three lecture

*Prerequisite:* Successful completion of TRE 089 and PCS 021 or appropriate score on assessment test.

Emphasizes play as a constructive process with applications to cognitive and social development, special attention to facilitating play in early childhood. Developing creative activities for young children through puppetry and drama, music and dance, movement exploration and play, and arts and crafts.

#### ECE 274 | PRACTICUM (2)

One lecture; Two lab.

*Prerequisite:* Successful completion of TRE 089 and PCS 021 or appropriate score on assessment test. Choose from ECE 271, ECE 272, or ECE 273.

Designed to provide the students with supervised practical experience. Provides opportunities to observe, implement and evaluate educational practices in a quality early childhood facility.

### EDUCATION

#### EDU 200 | CHILDREN'S LITERATURE (3)

*Transferable Course* | Three lecture

*Prerequisite:* Successful completion of ENG 101 or permission of academic chair.

Focuses on oral reading skills and involves both student and instructor in the reading process. Lecture and discussion are used to improve students' understanding of children's literature and to improve their techniques for reading and evaluation of children's texts. Experience in reading aloud to children is emphasized. The course also includes a study of the various genres of children's literature, requires a wide range of reading, and provides practice in storytelling.

#### EDU 205 | INTRODUCTION TO EDUCATION (3)

*Transferable Course* | Two lecture; two lab

*Prerequisite:* Successful completion of ENG 101

A survey of the field of education. Historical development, effective school theories, requirements for admission into teaching, approaches and theories, problems of teachers, organization and administration, and legal aspects of education are considered.

#### EDU 207 | PROVISIONAL STRUCTURED ENGLISH IMMERSION (1)

One lecture

Meets the SEI endorsement provisional certification requirements of the State of Arizona for current school teachers and administrators who received their AZ teaching certificate before August 31, 2006 with no breaks in their certification. Includes instruction in SEI methods of teaching English Language Learner students.

#### EDU 214 | CULTURAL DIVERSITY IN EDUCATION (3)

*Transferable Course* | Three lecture

*Prerequisite:* Successful completion of ENG 101

Surveys the impact of cultural diversity in the classroom; concentrating on how racial, ethnic, and gender issues shape a child's self-concept and learning style. Additional topics focus on prejudice, discrimination, scape-goating, stereotyping, and cultural incompatibilities as concerns in the classroom.

#### EDU 222 | THE EXCEPTIONAL STUDENT (3)

*Transferable Course* | Three lecture

*Prerequisite:* Successful completion of EDU 205

Provides an introduction to the physical and mental characteristics of students in special education. The course includes an introduction to the definitions and identifying characteristics of students with disabilities or health disorders and also includes an introduction to the laws, terminology, definitions, and specific educational recommendations for students with disabilities or health disorders.

#### EDU 240 | AUGMENTED PROVISIONAL STRUCTURED ENGLISH IMMERSION (3)

*Transferable Course* | Three lecture

*Prerequisite:* Successful completion of EDU 205 One or appropriate teaching experience.;

Two lab.

Designed to meet the Structured English Immersion Endorsement provisional certification requirements of the State of Arizona. Addresses SEI instructional methods for English Language Learners, including instruction in SEI strategies, ELL State Proficiency Standards, and assessment of ELL student academic progress. This is a post-baccalaureate course for professional educators only.

#### EDU 250 | STRUCTURED ENGLISH IMMERSION: METHODS AND MATERIALS IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (3)

*Transferable Course* | Three lecture

*Prerequisite:* Student must hold current teaching license.

Designed to meet the Full Structured English Immersion Endorsement requirements set forth by the State of Arizona. Focuses on methods, strategies, and materials development teaching English Language Learners (ELL). Includes the examination and implementation of the ELL Proficiency Standards for the State of Arizona, data analysis and application to the classroom, the creation and implementation of formal and informal ELL assessments, examination of the foundations of Structured English Immersion, and integration of parent/home/school relationships.

#### EDU 260 | BUILDING READING LITERACY THROUGH WORD STUDY, COMPREHENSION STRATEGIES AND



## PHONICS SKILLS (3)

### Three lecture

A synthesis of methods to explain the components of a reading program. Vocabulary instruction, spelling, comprehension, word recognition, fluency, phonics, and phonemic awareness will be considered.

## EDU 270 | CLASSROOM MANAGEMENT (3)

### Three lecture

*Prerequisite:* Successful completion of EDU 205

Surveys the classroom management strategies that have positive influences on student achievement as suggested by research. The role of classroom management, community building, relationships, rules, procedures, and interventions are considered.

## EDU 278 | PREPARING PARAPROFESSIONALS FOR PRAXIS ASSESSMENT (1)

### One lecture

A review of the field of paraprofessionals in education for Arizona. Skills and knowledge in reading, mathematics, and writing and applying those skills to assist in classroom instruction will be addressed.

## EDU 288 | PREPARING FOR THE ARIZONA EDUCATOR ASSESSMENTS: PROFESSIONAL KNOWLEDGE TEST (2)

### Two lecture

A review of the field of education for Arizona teaching certification. Professional knowledge, subject knowledge, areas covered by the Arizona Academic (K—12) Standards, the Arizona Professional Teaching Standards, and the Arizona Professional Administrative Standards are considered. Elementary and Special Education (test 91), Secondary and Career and Technical Education (test 92)

## ELECTRICAL

### ELC 110 RESIDENTIAL WIRING I (3)

#### Course Fee: \$40 | Two lecture; two lab

*Prerequisite:* Appropriate score on the assessment test or successful completion of TRE 089 and TRM 091. Completion or concurrent enrollment in BTR 105.

Covers common safe electrical trade practices, electrical hardware and materials including hand tools, specialty tool and power tools as well as the many measuring instrument types used in residential wiring. Common residential architectural symbols will be discussed, as well as service en-

trance sites, branch circuits and techniques for installing appropriate electrical boxes.

### ELC 111 | RESIDENTIAL WIRING II (3)

#### Course Fee: \$40 | Two lecture; two lab

*Prerequisite:* Successful completion of ELC 110, concurrent enrollment in ELC 112.

Continues from ELC with raceway types and installation requirements. Proper bending and installation techniques, common installation techniques for installing the conductors in a completed raceway system will be covered and practiced. Roughing-in the wiring for the switching circuits as well as common connection techniques for single-pole, three-way and four-way switching, and general lighting will be explored. Introduces the common installation practices for a structured cabling system, installation of lighting fixtures and device installation. Students will also practice the techniques used for service panel trim out, and troubleshooting electrical wiring systems.

### ELC 112 | ELECTRICAL SOLVING (2)

#### Two lecture

*Prerequisite:* Appropriate score on the assessment test or successful completion of TRM 091.

Covers the basic math skills needed for work in the electrical trade, from starting with basic arithmetic and progressing to algebra and trigonometry. Practical problems that represent situations typically faced by electricians will be emphasized and practiced.

### ELC 115 | AC/DC THEORY (3)

#### Three lecture

*Prerequisite:* Appropriate score on the assessment test or successful completion of TRM 091 and TRE 089.

Examines the essential elements of alternating and direct current electrical theory. Topics will include the atomic structure, the study of material properties as conductors, semiconductors, and insulators, an in-depth exploration of Ohm's law and how it relates to voltage, current, resistance and power. Three-phase and single-phase circuitry will be covered as well as topics such as parallel and series circuits, magnetism, transformers and generators. Will focus on the theoretical concepts that are necessary for a successful career as an electrician.

### ELC 120 | NEC CODES FOR RESIDENTIAL ELECTRICITY (3)

#### Three lecture

*Prerequisite:* Appropriate score on the assessment test or successful completion of TRM 091 and TRE 089.

Analyze and interpret residential drawing, local codes and specific sections of the National Electrical Code. Includes needed materials derived from plans and specifications and the proper procedures for wiring a residence.

### ELC 200 | GROUNDING AND BONDING (2)

#### Course Fee: \$20 | One lecture; two lab

*Prerequisite:* Successful completion of ELC 110 and ELC 111, or ELC 210 and ELC 211.

Covers the essential elements of electrical grounding and bonding. Examines the concepts of calculating conductor sizes, and the use of grounded conductor connections in electrical installations. Will focus on the process of reading and interpreting the appropriate NEC tables. Includes study and practice in various installations and sizing activities.

### ELC 205 | RELAY CONTROL SYSTEMS (3)

#### Course Fee: \$40 | Two lecture; two lab

*Prerequisite:* Successful completion ELC 210 and ELC 211 or permission of academic chair.

Covers the principles and operation of basic relay control systems, including programmable logic controllers, and other solid-state devices that are commonly used in industrial settings and to industrial motors and automated equipment. The programming procedures for these devices will be covered, as well as typical installation practices and procedures. Advanced topics such as robotics and remote sensing devices will be discussed.

### ELC 210 | COMMERCIAL/ INDUSTRIAL ELECTRICITY I (3)

#### Course Fee: \$40 | Two lecture; two lab

*Prerequisite:* Successful Completion of ELC 110-ELC 115, or demonstration of previous electrical experience.

Covers the theory and application of electrical concepts for industrial maintenance and installation. Will emphasize single-phase and three-phase installation, measuring instruments, conduction in liquids and gases, and the use of trigonometry and vectors in electrical calculations. Advanced topics

## Course Descriptions

such as magnetic induction, resistive-inductive series and parallel circuits, filters, three-phase transformers, three-phase alternators will also be explored.

### **ELC 211 | COMMERCIAL/ INDUSTRIAL ELECTRICITY II (3)**

**Course Fee: \$40 | Two lecture; two lab**

*Prerequisite: Successful completion of ELC 210.*

Continues the study of electricity as applied to the industrial setting. Advanced topics such as industrial lighting and lighting circuits, electrical distribution systems for 460 3-phase, 240V 3-phase, and 240/120 single-phase will be covered. In addition, local control stations, underground distribution system, as well as distribution maintenance will be studied.

### **ELC 220 | ELECTRICAL MOTORS AND CONTROLS (3)**

**Course Fee: \$40 | Two lecture; two lab**

*Prerequisite: Successful completion of ELC 210 and ELC 211.*

Will explore the operation of variable frequency drives, solid-state relays and other systems that utilize electronic devices. Covers the principles of single and three-phase motors, as well as motor current draw, sequence of operation, wiring diagrams and the electrical components associated with industrial motors. Procedures for evaluating electrical and mechanical problems with motors, including the applicable safety equipment and procedures will be stressed.

### **ELC 221 | LOW VOLTAGE SYSTEMS (3)**

**Course Fee: \$40 | Two lecture; two lab**

*Prerequisite: Successful completion of ELC 115 or permission of academic chair.*

Examines the installation and integration of various low voltage systems such as fire alarms, communication systems, audio processing, and closed circuit television. Topics include speaker placement, Class 1, 2, and 3 remote control, signaling and power limited circuits, optical cables and raceways. NEC codes including Articles 640 – 830 that provide cabling and installation standards will be emphasized.

### **ELC 225 | NEC CODES FOR COMMERCIAL (3)**

**Three lecture**

*Prerequisite: Successful completion of ELC 210, or demonstration of previous electrical ex-*

*perience and permission of academic chair.*

IN-depth study of industrial electrical power techniques of low, medium and high-voltage systems. Selection of electrical distribution components, single and three phase systems, on line diagrams, motors, transformers, protective devices, power factor, demand factor, conductor selection, system planning, grounding and energy management.

## **EMERGENCY MEDICAL SERVICES**

### **EMS 120 | FIRST AID (3)**

*Transferable Course | Course Fee: \$20*

**Two lecture; two lab.**

Presents instruction in theory and practice of first aid. Provides the student with knowledge and skill necessary to meet common emergencies associated with injury and illness. Topics include: CPR, bone and joint injuries, dressings and bandages, sudden illness, and emergency childbirth.

### **EMS 122 | FIRST RESPONDER (3)**

**Course Fee: \$40 | Two lecture; three lab.**

Provides a viable alternative to EMT training to police, fire, industrial and other first responders without the commitment of time and recertification requirements associated with an EMT training program.

### **EMS 200 | EMS INSTRUCTIONAL STRATEGIES (2)**

**Course Fee: \$45 | Two lecture**

*Prerequisite: An EMT with a minimum of (2) two years experience as an EMT – Basic or higher (R9-25-312) and the recommendation of an MCC EMS instructor*

*Corequisite: American Heart Association Basic Life Support Instructor.*

This course is designed to prepare and make eligible the participant to gain approval to instruct Basic Emergency Medical Technician Courses in accordance with the Rules established by the Arizona Department of Health Services, Bureau of Emergency Medical Services and Trauma.

### **EMS 220 | FIRST RESPONDER REFRESHER (1.5)**

**Course Fee: \$10 | One lecture; one lab.**

*Prerequisite: Successful completion of EMS 122.*

Designed to provide first responders with refresher skills to assure maintenance of the

First Responder certifications as required by state and federal law. Students who have successfully completed EMS 122 are required to successfully complete this course every two (2) years for recertification.

### **EMS 222 | BASIC EMT (8)**

**Course Fee: \$120 | Six lecture; six lab.**

*Prerequisite: 18 years of age, appropriate score on assessment test or successful completion of PCS 021 and acceptance into program (approved application packet).*

Covers all techniques of emergency medical care currently considered as responsibilities of the emergency medical technician. Skills are developed in recognizing symptoms of illness and injury and proper procedures of emergency care. Includes study of anatomy, physiology, triage, assessment and stabilization of patients. This course leads to National and State Certification as an EMT-Basic.

### **EMS 225 | REFRESHER EMT (3)**

**Course Fee: \$20**

**Two and one-half lecture; one lab.**

*Prerequisite: Successful completion of EMS 222 or permission of director.*

Designed for emergency medical technicians to assure maintenance of a uniformly high level of training and skills in emergency care. Updating of basic skills; employment of acceptable, newly-developed equipment; new equipment faults that are not acceptable; and changes in state licensure or medico-legal requirements. Students who have satisfactorily completed EMS 222 will be required to successfully complete this course every two years prior to being recertified or relicensed as outlined by state and federal requirements.

### **EMS 240 | PARAMEDIC I (6)**

**Course Fee: \$240 | Five lecture; two lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRM 091; application to EMS director, current Arizona certified EMT; one year field experience; current Healthcare Provider or Professional Rescuer CPR card; successfully complete written, practical and oral examination; and be accepted into Paramedic program.*

Provides the roles and responsibilities of the paramedic, including communications, rescue, patient assessment, airway, shock, general pharmacology and stress management.

## EMS 241 | PARAMEDIC II (6)

**Course Fee: \$240 | Five lecture; two lab.**

*Prerequisite: Successful completion of EMS 240.* Provides a concentrated focus on the latest philosophies and techniques for recognizing and managing trauma patients.

## EMS 242 | PARAMEDIC III (6)

**Course Fee: \$240 | Five lecture; two lab.**

*Prerequisite: Successful completion of EMS 241.* Provides instruction in the anatomy and physiology of the conduction system of the heart, the electrical system, electrocardiography, abnormal EKG patterns, the recognition and management of dangerous or life threatening dysrhythmias, and didactic and psychomotor skill training in techniques of advanced cardiac life support. Includes endotracheal intubation, defibrillation, cardiovascular pharmacology, and newborn resuscitation.

## EMS 243 | PARAMEDIC IV (6)

**Course Fee: \$240 | Four lecture; six lab.**

*Prerequisite: Successful completion of EMS 242.* Provides instruction in anatomy and physiology and management techniques for medical emergencies. Students will begin clinicals in a hospital setting.

## EMS 244 | PARAMEDIC V (8)

**Course Fee: \$240 | Four lecture; eight lab.**

*Prerequisite: Successful completion of EMS 243.* Provides instruction in drug and alcohol abuse, infectious diseases, environmental injuries, and geriatrics to enable the student to become a certified paramedic.

## EMS 245 | ADVANCED CARDIAC LIFE SUPPORT (1)

**One lecture**

*Prerequisite: Current Arizona Certified IEMT and above.*

Designed for health care providers, this course provides lecture and psychomotor training for advanced cardiac life support. Instruction includes: endotracheal intubation, defibrillation, dysrhythmia recognition, cardiovascular pharmacology and newborn resuscitation. This class meets the American Heart Association Advanced Cardiac Life Support (ACLS) provider certification and recertification requisites.

## EMS 248 | PARAMEDIC REFRESHER (3)

**Course Fee: \$75 | Two lecture; Three lab.**

*Prerequisite: Current or inactive paramedic certification.*

Designed to provide updated information and practical application refresher instruction to meet the minimum acceptable standards required for paramedic recertification.

## EMS 250 | TRAUMA LIFE SUPPORT (1)

**Course Fee: \$80 | One lecture**

*Prerequisite: Current Arizona Certified Emergency Medical Technician.*

Provides a concentrated focus on the latest philosophies and techniques for recognizing and managing trauma patients.

## EMS 251 | PEDIATRIC EDUCATION FOR PRE-HOSPITAL PROFESSIONALS (BASIC LIFE SUPPORT) (1)

**Course Fee: \$20 | One lecture**

*Prerequisite: Current Arizona Certified Emergency Medical Technician.*

Provides a concentrated focus on the latest philosophies and techniques for recognizing and managing pediatric patients.

## ENGINEERING

### EGR 102 | INTRODUCTION TO ENGINEERING (3)

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of MAT 181*

Comprehensive engineering problem-solving incorporating the design process, its scientific basis, hands-on teamwork, effective communication, ethical implications and the profession itself.

## ENGLISH

### ENG 101 | ENGLISH COMPOSITION I (3) ENG 1101

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Reviews the fundamentals of grammar, sentence structure and paragraphs. Includes extensive theme writing with emphasis on exposition and critical thinking.

### ENG 102 | ENGLISH COMPOSITION II (3) ENG 1102

*Transferable Course | Three lecture*

*Prerequisite: Completion of ENG 101 with a grade of "C" or better.*

Continuation of the composition and rhetoric focus of ENG 101 with an emphasis on persuasive, research-based writing.

## ENG 136 | REPORT WRITING (3)

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of ENG 101.*

Develops writing skills with an introduction to the general principles of business and technical writing, including the writing process, various writing formats, research, and special concerns related to written communication in the workplace.

## ENG 137 | INTRODUCTION TO LITERATURE (3)

**Three lecture**

*Prerequisite: Successful completion of ENG 101*

Introductory course in imaginative literature designed to provide students the skills necessary for understanding, appreciating, and analyzing works of fiction, poetry and drama.

## ENG 138 | CREATIVE WRITING I (3)

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of ENG 101 or permission of academic chair.*

Introductory study and practice of the craft of writing fiction, poetry and creative non-fiction with an emphasis on the reading and discussion of student manuscripts and of published works of contemporary writers.

## ENG 233 | ENGLISH LITERATURE I (3)

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of ENG 101.*

Major works in English literature from Beowulf through Neoclassical periods are included.

## ENG 234 | ENGLISH LITERATURE II (3)

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of ENG 101*

A general survey of English literature from the mid-eighteenth century to the late twentieth century. Includes representative readings from the Romantic, Victorian, Modern and Post-Modern periods.

## ENG 235 | AMERICAN LITERATURE I (3)

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of ENG 101*

A general survey of American literature from the time of European discovery through the Civil War. Includes readings in Native American traditions as well as works by such representative American writers as Anne Bradstreet, Mary Rowlandson, Benjamin Franklin, Phillis Wheatley, Jonathan Edwards, Washington Irving, Ralph Waldo

## Course Descriptions

Emerson, Henry David Thoreau, Edgar Allan Poe, Nathaniel Hawthorne, Frederick Douglass, Herman Melville, Emily Dickinson, Walt Whitman, and Rebecca Harding Davis.

### **ENG 236 | AMERICAN LITERATURE II (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of ENG 101.*

A general survey of American literature from the Civil War to the present. Includes readings by such representative American writers as Mark Twain, Henry James, Ambrose Bierce, Kate Chopin, Charlotte Perkins Gilman, Charles Chesnutt, Zitkala Sa, T. S. Eliot, William Carlos Williams, Susan Glaspell, F. Scott Fitzgerald, Langston Hughes, Ernest Hemingway, Zora Neale Hurston, Richard Wright, William Faulkner, Tennessee Williams, Sylvia Plath, Ralph Ellison, Flannery O'Connor, Louise Erdrich, Elizabeth Bishop, Amy Tan, David Mamet, Joy Harjo, Leslie Marmon Silko, Raymond Carver, Alice Walker, Sherman Alexie, Billy Collins, and Li-Young Lee.

### **ENG 238 | WRITING FICTION (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of ENG 101 or permission of academic chair.*

Intensive study and practice of the craft of fiction writing with an emphasis on the reading and discussion of student manuscripts and of published short fiction by contemporary writers.

## **ENGLISH LANGUAGE ACQUISITION**

### **ELA 029 | ELA ORIENTATION (1)**

**One lecture**

*Prerequisites: Must be 16 years of age or older and not in high school.*

A 15-hour-orientation, designed to assess a student's academic competency. Emphasis is placed on the students understanding of the ELA program expectations, time requirements, and the opportunity to improve understanding of English. A portion of the orientation is class placement which is based on pre-testing, using the Test of Adult Basic Education (TABE) or the Test of Adult Basic Education Complete Language Assessment System - English (TABE CLAS E). Also included will be student success strategies for Non-English speaking students. The student

must complete ELA 029 in order to take any ELA classes.

### **ELA 030 | ELA BEGINNERS (3)**

**Three lecture**

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 029 ELA Orientation, or obtain an appropriate score on the TABE CLAS E test.*

A 3-credit-hour course, designed for students with no prior experience in the English language continuing from ELA 029.

This class is intended to introduce students to basic vocabulary, grammar, listening and speaking skills which will enable them to function in daily activities.

### **ELA 031 | ELA READING AND WRITING I (3)**

**Three lecture**

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 030 ELA Beginners, or obtain an appropriate score on the TABE CLAS E test.*

A 3-credit-hour course, designed as an introductory level ELA course continuing from ELA 030 in English grammar and usage for students whose first language is not English. The course introduces Basic English structure through all the skill areas focusing on reading and writing.

### **ELA 032 | ELA LISTENING AND SPEAKING I (3)**

**Three lecture**

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 031 Reading and Writing 1, or obtain an appropriate score on the TABE CLAS E test.*

A 3-credit-hour course, designed as a continuation ELA 031 course for students with some English experience. The course is intended to expose students to beginning vocabulary, grammar, listening and speaking. This will enable students to function in daily activities and employment on a beginning level.

### **ELA 033 | ELA READING AND WRITING II (3)**

**Three lecture**

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 032 Listening and Speaking 1, or obtain an appropriate score on the TABE CLAS E test.*

A 3-credit-hour course, designed as a continuation of the ELA 032. This course continues presenting Basic English structure through all skill areas focusing on reading, and writing.

### **ELA 034 | ELA LISTENING AND SPEAKING II (3)**

**Three lecture**

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 033 Reading and Writing 2, or obtain an appropriate score on the TABE CLAS E test.*

A 3-credit-hour course, designed as a continuation of the ELA 033 course for students with some English experience. The course is intended to expose students to intermediate vocabulary, grammar, listening and speaking skills. This class will enable students to function in daily activities on an intermediate level and to function comfortably with English in employment.

### **ELA 035 | ELA READING AND WRITING III (3)**

**Three lecture**

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 034 Listening and Speaking 2, or obtain an appropriate score on the TABE CLAS E test.*

A 3-credit-hour course, designed as a continuation of ELA 034 course in English grammar for the students whose first language is not English.

### **ELA 036 | ELA LISTENING AND SPEAKING III (3)**

**Three lecture**

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 035 Reading and Writing 3, or obtain an appropriate score on the TABE CLAS E test.*

A 3-credit-hour course, designed as a continuation of the ELA 035 course for students with some English experience. It is intended to expose students to high-intermediate vocabulary, grammar, listening and speaking skills; to enable them to function in daily activities on a high-intermediate level and to function comfortably with English in employment.

### **ELA 037 | ELA READING AND WRITING IV (3)**

## Three lecture

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 036 Listening and Speaking 3, or obtain an appropriate score on the TABE test.*  
A 3-credit-hour course, designed as an advanced ELA course in English grammar for students whose first language is not English.

## ELA 038 | ELA LISTENING AND SPEAKING IV (3)

### Three lecture

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 037 Reading and Writing 4, or obtain an appropriate score on the TABE test.*  
A 3-credit-hour course, designed as a continuation of the Advanced ELA course for students with some English experience. The course is intended to expose students to advanced vocabulary, grammar, listening and speaking skills; to enable them to function in daily activities on an advanced level and to function comfortably with English in employment.

## ELA 039 | ELA READING AND WRITING V (3)

### Three lecture

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 038 Listening and Speaking 4, or obtain an appropriate score on the TABE test.*  
A 3-credit-hour course, designed as a continuation of the advanced ELA course in English Grammar and usage for the students whose first language is not English. The course continues presenting advanced English structure throughout all the skill areas of listening, speaking, reading, and writing.

## ELA 040 | ELA CITIZENSHIP PREPARATION (3)

### Three lecture

*Prerequisites: Must be 16 years of age or older and not in high school. Must successfully complete ELA 034 Listening and Speaking 2, or obtain an appropriate score on the TABE test.*  
A 3-credit-hour course, designed as an intermediate course that presents historical, political, geographical and other cultural information necessary to successfully complete the written and oral portion of the U.S. citizenship exam. Students will practice and develop the skills necessary to successfully complete the required personal interview including providing information about

themselves and correctly and comfortably answering content questions.

## ENVIRONMENTAL SCIENCE

### ENV 101 | ENVIRONMENTAL SCIENCE (4)

#### Three lecture; Three lab.

*Transferable Course | Course Fee: \$40*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 091 or permission of academic chair.*  
An introductory course that examines human influence on the environment. Basic ecological concepts are explored and major environmental problems including population growth, pollution, resource overuse; ecological degradation and the loss of biodiversity are evaluated for causes and solutions. The relationship between society, politics and the environment is also examined.

## FIRE SCIENCE

### FSC 105 | PRINCIPLES OF EMERGENCY SERVICES (3)

#### Three lecture

This course provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introductory to fire strategy and tactics.

### FSC 110 | FIRE FIGHTER ACADEMY (10) Course Fee: \$2990 | Eight lecture; six lab.

This course is intended to introduce the student to the organization of the fire department; the role of the fire fighter in the organization, the fire department's standard operating procedures and the role of other agencies as they relate to the fire department.

### FSC 112 | HAZARDOUS MATERIALS CHEMISTRY I (3)

#### Three lecture

This course provides basic fire chemistry relating to the categories of hazardous

materials including problems of recognition, reactivity, and health encountered by firefighters.

### FSC 120 | FIRE BEHAVIOR AND COMBUSTION (3)

#### Three lecture

The course explores the theories and fundamentals of how and why fires start, spread and who they are controlled.

### FSC 131 | FIRE PROTECTION HYDRAULICS AND WATER SUPPLY (4)

#### Three lecture; two labs

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

### FSC 133 | FIRE PREVENTION (3)

#### Three lecture

Surveys the fundamentals of fire prevention, including techniques, procedures, regulations, enforcement, and hazards in ordinary and special occupancies.

### FSC 220 | OCCUPATIONAL SAFETY AND HEALTH FOR THE FIRE SERVICE (3)

#### Three lecture

This course introduces the basic concept of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, and technical rescue. Upon completion of this course, students should be able to establish and manage a safety program in an emergency service organization.

### FSC 221 | FIRE ADMINISTRATION I (3) Three lecture

This course introduces the student to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis is on fire service leadership from the perspective of the company officer.

### FSC 222 | FIRE PROTECTION SYSTEMS (3)

#### Three lecture

This course provides information relating to the features of design and operation of fire

## Course Descriptions

alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

### **FSC 223 | LEGAL ASPECTS OF THE FIRE SERVICE (3)** Three lecture

This course introduces the federal, state and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability and a review of relevant court cases.

### **FSC 233 | BUILDING CONSTRUCTION FOR FIRE PROTECTION (3)** Three lecture

This course provides the components of building construction that relate to fire and life safety. The focus of this course is on firefighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations and operating at emergencies.

### **FSC 235 | FIRE STRATEGY / TACTICS (3)** Three lecture

*Prerequisite: Successful completion of FSC 105.* This course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment and extinguishing agents on the fire ground.

### **FSC 242 | FIRE INVESTIGATION I (3)** Three lecture

This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire science interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the firesetter and types of fire causes.

### **FSC 243 | FIRE INVESTIGATION II (3)** Three lecture

*Prerequisite: Successful completion of FSC 242* This course is intended to provide the student with advance technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and testifying.

## FRENCH

### **FRE 101 | ELEMENTARY FRENCH I (4)** **FRE 1101**

*Transferable Course | Four lecture; one lab*  
*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Develops the fundamental language skills: speaking, listening comprehension, writing and reading comprehension.

### **FRE 102 | ELEMENTARY FRENCH II (4)** *Transferable Course*

**Four lecture; one lab**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 091.*

Develops the fundamental language skills: speaking, listening comprehension, writing and reading comprehension. A continuation of FRE 101.

### **FRE 201 | INTERMEDIATE FRENCH I (4)**

*Transferable Course | Four lecture; one lab*  
*Prerequisite: Successful completion of FRE 102 or permission of academic chair.*

Reviews then consolidates and increases the skills learned in FRE 101 and FRE 102. It continues the practice and development of the fundamental language skills: speaking, listening comprehension, writing and reading comprehension at the intermediate level. It continues the development of communicative competence.

### **FRE 202 | INTERMEDIATE FRENCH II (4)**

*Transferable Course | Four lecture; one lab*  
*Prerequisite: Successful completion of FRE 201 or permission of academic chair.*

A continuation of FRE 201. The course continues to review, consolidate and increase the basic skills learned in FRE 101 and FRE 102. Emphasis on communication through reading comprehension, speaking, listening comprehension, composition and culture.

## GEOGRAPHY

### **GHY 212 INTRODUCTION TO METEOROLOGY (4)**

*Transferable Course*

**Course Fee: \$40 | Three lecture; three lab.**  
*Prerequisite: Appropriate score on assessment test or successful completion of TRE 089 and*

*TRM 091.*

Introduction to physical and chemical conditions that regulate global weather phenomenon on Earth. Topics covered include structure of the atmosphere, temperature, air pressure, humidity, winds, the development of weather systems, tornadoes, hurricanes and the parameters that affect local and global climate. Laboratory map interpretation and field investigations are included to provide experimental learning opportunities.

### **GHY 213 INTRODUCTION TO CLIMATE STUDIES (4)**

**Course Fee: \$40 Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of TRE 089 and TRM 091*

Introduces the basic components of the climate system, feedback loops, short-term and long-term forecasting, planetary energy budget, detailed analysis of greenhouse gases, global atmospheric and oceanic circulation patterns, and natural and anthropogenic influences on the climate balance.

### **GHY 240 WORLD REGIONAL GEOGRAPHY (3)** **GEO 1121**

*Transferable Course | three lecture*

*Prerequisite: Appropriate score on the assessment test or successful completion of PCS 021 and TRE 089.*

Provides an understanding of the interactions between people and their environments through a survey of the world's major realms. Each realm will be examined in terms of its physical, social, economic, and political conditions from a geographic perspective. Emphasis will be on contemporary issues and their geographic impact of world regions.

## GEOLOGY

### **GLG 101 | PHYSICAL GEOLOGY (4)** **GLG 1101**

*Transferable Course | Course Fee: \$40*  
**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or completion of TRE 089 and TRM 091.*

An introduction to geologic processes on and within the Earth. Topics covered include concepts in mineral and rocks, tectonic processes, weathering and erosion, sedimentation, structural deformation, landscape development and ground water. Laboratory work and additional field trips are included

to provide observational examples of the above topics and to learn geologic field techniques of data gathering.

## **GLG 102 | HISTORICAL GEOLOGY (4)**

*Transferable Course* | **Course Fee: \$40**

**Three lecture; three lab.**

*Prerequisite: Successful completion of GLG 101.*

An introduction to the evolutionary history of the earth and life on the planet. Topics covered include concepts in stratigraphy, rock dating, tectonic events, global climate and ecologic changes, and the study of faunal and floral succession over geologic periods of time. Laboratory work and additional field trips are included to provide observational examples of the above topics and to learn geologic field techniques of data gathering.

## **GLG 110 | ENVIRONMENTAL GEOLOGY/NATURAL DISASTERS (4)**

*Transferable Course* | **Course Fee: \$40**

**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 091.*

An introduction to Earth system phenomena and associated problems in conjunction with human activities. Causes of geologic and meteorologic disasters are investigated including earthquakes, volcanic activity, landslides, flooding, groundwater contamination, soil erosion, surface subsidence, coastal problems, tropical storms, tornadoes and precipitation. Laboratory and field investigations are included to provide experiential learning opportunities.

## **GLG 140 | INTRODUCTION TO OCEANOGRAPHY (4)**

*Transferable Course* | **Course Fee: \$40**

**Three lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of TRE 089 and TRM 091.*

This course introduces physical, chemical, and geological conditions that regulate global ocean phenomenon. Topics covered include history of oceanography, physical and chemical properties of ocean water, air-sea interactions, current, wave, and tidal phenomenon, origins of the oceans, geologic processes and features, biological influences, and environmental issues. Laboratory exercises are included to provide experiential learning opportunities.

## **HEALTH SCIENCE**

### **HES 107 | INTRODUCTION TO HEALTH CARE OCCUPATIONS (3)**

**Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089*

This introductory course provides an overview of health professions and the health care delivery system. Other topics will include disease prevention and wellness promotion, guidelines for legal and ethical practice, and communication skills. This course will acquaint the student with basic anatomy and physiology as it relates to health care.

### **HES 113 | MEDICAL TERMINOLOGY (3)**

**Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089*

Presents a study of basic medical terminology. A programmed learning, word-building system will be used to master common medical terms. Emphasis is placed on spelling, definition, usage and pronunciation. Commonly used abbreviations will be introduced.

### **HES 128 | PHARMACOLOGY: ALLIED HEALTH OCCUPATIONS (3)**

**Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of the PCS 021, TRE 089 and TRM 090.*

The course provides an introduction of pharmacology to include common drug classifications, actions, uses, and side effects of pharmacological agents. Accurate calculation of dosage, legal and safety considerations, as well as patient care implications will be emphasized.

### **HES 129 | ALLIED HEALTH ANATOMY AND PHYSIOLOGY (3)**

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of HES 113 or concurrent enrollment in HES 113.*

The basic concepts of anatomy and physiology of the human body are organized and presented by organ systems. Emphasis will be placed on vocabulary as well as the basic mechanisms of disease and pathology for each body system, as required in medical assisting and related professions.

## **HEATING, VENTILATION AND AIR CONDITIONING**

### **HVA 105 | FUNDAMENTALS OF REFRIGERATION (3)**

**Course Fee: \$60** | **Two lecture Two lab.**

Covers the basic principles of the refrigeration cycle. Emphasizes the safe use of the hand and power tools used in the trade, copper and plastic piping practices, as well as soldering and brazing. Basic electrical concepts as applied in the refrigeration industry will also be covered. Pressure and temperature gauges will be introduced and basic maintenance skills will be discussed. Attention will be given to how the HVAC trade has been impacted by environmental concerns.

### **HVA 110 | EPA TEST PREP (1)**

**One lecture**

*Prerequisite: Successful completion of HVA 105 and BTR 105 or permission of academic chair.*

Focuses on the concepts and procedures that apply to the national EPA refrigerant certification test. Emphasis will be on the proper transport, storage, and disposal of refrigerants and refrigerant containers in accordance with environmental concerns and regulations. Chlorine-based refrigerants and the impact that they have on the environment will be discussed. An additional fee is required at the time of the actual test.

### **HVA 120 | RESIDENTIAL HVAC INSTALLATION (3)**

**Course Fee: \$60** | **Two lecture; two lab.**

*Prerequisite: Successful completion of HVA 105 and BTR 105 or permission of academic chair.*

Covers air distribution systems, including airflow, pressures and various ducting systems. Techniques for proper installation of flexible ducting and ductboard systems and installation techniques for refrigerant piping, the use of rigging and system placement will be emphasized. The electrical requirements for installation, will also be covered. Alternative energy sources and energy efficient units will also be discussed.

### **HVA 130 | RESIDENTIAL HVAC (3)**

**Course Fee: \$60** | **Two lecture; two lab.**

*Prerequisite: Successful completion of HVA 105 and BTR 105 or permission of academic chair.*

Covers the use of the refrigeration cycle as

## Course Descriptions

used in residential air conditioning systems. Emphasizes control circuits, metering devices, compressors, leak detection, evacuation and recovery. System charging techniques, using the appropriate tools and gauges, and the appropriate troubleshooting methods for servicing a system will be covered. The removal and replacement of mechanical and electrical components will be practiced. Service procedures to ensure energy efficiency will also be discussed.

### **HVA 140 | RESIDENTIAL HEATING (2)**

**Course Fee: \$60 | One lecture; two lab**

*Prerequisite: Successful completion of HVA 105 and BTR 105 or permission of academic chair.*

Focuses on the maintenance and repair of residential heating systems, including chimneys, vents, and flues. Troubleshooting procedures for gas-fired, electrical heating systems, heat pump systems, as well as the related control circuits and ducting systems will be emphasized. Alternative types of heating sources including solar, hydrothermic, and water-source heat pumps will also be discussed.

### **HVA 150 | REFRIGERATION ELECTRICAL TROUBLESHOOTING (3)**

**Course Fee: \$60 | Two lecture; two lab.**

*Prerequisite: Successful completion of HVA 105 and BTR 105 or permission of academic chair.*

Covers AC theory as it applies to refrigeration systems, including transformers, capacitors, the various types of motors used in refrigeration equipment, safety, and the use of appropriate test equipment. Troubleshooting techniques for motor and motor control problems, as well as troubleshooting control circuits, and electrical malfunctions related to mechanical refrigeration systems will be covered and practiced. Energy efficient controls and components will also be discussed.

### **HVA 210 | COMMERCIAL AIR MANAGEMENT (2)**

**Two lecture**

*Prerequisite: Successful completion of HVA 140 and 150 or permission of academic chair.*

Covers the operating principles of commercial air systems, including their components, capacities and uses. Hydronic heating and cooling systems design and operation, including load and water balancing, steam cycle, dual-temperature water systems, and water treatment systems will

be discussed. The importance of indoor air quality, building management systems and computerized energy management that aid in energy conservation will also be covered.

### **HVA 220 | COMMERCIAL AND DOMESTIC REFRIGERATION (3)**

**Course Fee: \$60 | Two lecture; two lab.**

*Prerequisite: Successful completion of HVA 140 and HVA 150 or permission of academic chair.*

Covers the use of refrigeration theory in both low and medium temperature domestic and commercial refrigeration systems. The operation of commercial and domestic ice making equipment, water coolers, refrigerators, and walk-in coolers and freezers will be discussed and practiced. Charging and evacuation techniques, as well as mechanical and electrical troubleshooting and repair will be covered.

## **HISTORY**

### **HIS 131 | HISTORY OF THE UNITED STATES I (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Contains a survey of the political, economic, and cultural history of the United States with emphasis placed on historical events, people and movements that impacted American society.

### **HIS 132 | HISTORY OF THE UNITED STATES II (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

A continuation of the survey of the United States history from the period of reconstruction to the present day.

### **HIS 135 | WESTERN CIVILIZATION I (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Contains a broad, historical study of the major elements in the western heritage from the world of the Greeks and Romans through the Middle Ages, Renaissance and Reformation to the Peace of Westphalia in 1648. Emphasis is placed on the history of Europe.

### **HIS 136 | WESTERN CIVILIZATION II (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

A continuation of Western Civilization starting with the Peace of Westphalia in 1648 and proceeding to the 20th Century.

### **HIS 137 | 20TH CENTURY WORLD HISTORY (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

The study of the social, political and cultural trends of the world in modern times. Emphasis will be given to contemporary events to provide a historical perspective.

### **HIS 234 | HISTORY OF INDIANS OF NORTH AMERICA (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

A survey of the political, cultural and social experience of the Native American from the period of the earliest European explorations to the present, including such developments as Indian nationalism. Relations among Indian groups to establish continuity of Indian societies will be emphasized.

### **HIS 274 HISTORY OF MEXICO (3)**

**Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Covers the history of Mexico from pre-Columbian times to the present. It includes political, economic, social and cultural developments covering the periods of the Mayas, Aztecs, the Spanish Independence, and the Revolution to the present.

### **HIS 281 LATIN AMERICAN HISTORY (3)**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Surveys Latin American history from Colonialism and Independence to the present day.



## HUMANITIES

### HUM 150 – INTRODUCTION TO THE HUMANITIES I - PREHISTORY TO THE MIDDLE AGES (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

The study of the creative, historical and philosophical development of civilization. Examines the humanistic values, ideas and artistic expressions that have shaped western and global traditions from prehistory to the early modern world.

### HUM 151 INTRODUCTION TO HUMANITIES II - RENAISSANCE TO THE PRESENT (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

The study of the creative, historical and philosophical development of civilization. Examines the humanistic values, ideas, and artistic expressions that have shaped western and global traditions from the Renaissance to present day.

### HUM 250 | INTRODUCTION TO CINEMA (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

An examination of aesthetic values in short- and feature-length moving pictures; history of movies; and technical aspects of directing, photographing, editing and sound track scoring are included. Films shown will illustrate motion-capture and/or computer-generated animation, literature or theatre as these stories are adapted to film, various genres and sub-genres of film (film noir, western, documentary, gangster/detective, screwball comedy, historical/biographical epic), special effects and other elements of pre- and post-production elements of filmmaking.

## MATHEMATICS

### MAT 121 | INTERMEDIATE ALGEBRA (4)

**Four lecture**

*Prerequisite: Appropriate score on assessment*

*test or successful completion of TRM 091.*

Intermediate Algebra extends and strengthens concepts covered in Beginning Algebra, including linear equations, inequalities and functions, operations on polynomials, rational expressions and functions and quadratic equations, inequalities, and functions.

### MAT 142 COLLEGE MATHEMATICS (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or completion of MAT 121 with a grade of "C" or better.*

Applications of basic college-level mathematics to real-life problems. Concepts, language and history of mathematics contributions to Western society also covered. Appropriate for students whose major does not require College Algebra or Pre-calculus.

### MAT 151 | COLLEGE ALGEBRA (4)

SUN# MAT 1151

*Transferable Course* | **Four lecture**

*Prerequisite: Appropriate score on assessment test or completion of MAT 121 with a grade of "C" or better.*

A more extensive and rigorous course in algebra. Emphasis in this course is on functions and relations. Systems of equations, inequalities and matrices are also covered.

### MAT 160 | MATH FOR ELEMENTARY TEACHERS I (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or completion of MAT 142 or MAT 151 with a grade of "C" or better.*

Mathematical principles and processes underlying current and evolving programs of mathematics instruction in elementary schools for the grades K-8. The focus is on problem solving, logic, set theory, number systems and arithmetic.

### MAT 161 | MATH FOR ELEMENTARY TEACHERS II (3)

*Transferable Course* | **Three lecture**

*Prerequisite: MAT 160 with a grade of "C" or better.*

Mathematics for Elementary Teachers II is designed to aid prospective elementary teachers to understand and apply the mathematical principles and processes underlying current and evolving programs of mathematical instruction, grades K-8. This course emphasizes problem solving, reasoning, statistics and probability, geometry, and measurement.

### MAT 181 | PLANE TRIGONOMETRY (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or completion of MAT 151 with a grade of "C" or better.*

A study of trigonometric functions, inverse functions, identities and graphs and their applications to right and oblique triangles, vectors, complex numbers, and polar and parametric equations.

### MAT 201 | FINITE MATHEMATICS (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Completion of MAT 151 with a grade of "C" or better.*

Focuses on the application of linear models, systems of linear equations, matrices, linear programming, mathematics of finance, combinatorics, probability, and statistics to solve problems in life and social sciences, business, management, and economics.

### MAT 211 | INTRODUCTORY STATISTICS (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Completion of MAT 142 or MAT 151 with a grade of "C" or better.*

Investigates the basic concepts and techniques of descriptive and inferential statistics, including summaries and displays of data, measures of central tendency, variation and dispersion, probability and probability distributions, estimates and sample sizes, hypothesis testing, correlation, regression and statistical decision-making using critical thinking skills.

### MAT 212 | BRIEF CALCULUS (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Successful completion of MAT 151 with a grade of "C" or better.*

A study of elementary topics in differential and integral calculus of elementary functions with applications in business and social science.

### MAT 221 | ANALYTIC GEOMETRY AND CALCULUS I (4)

**SUN# MAT 2220**

*Transferable Course* | **Four lecture**

*Prerequisite: Successful completion of MAT 181 with a grade of "C" or better.*

A study of the differential and integral calculus of elementary functions, with applications to geometry mechanics.

## Course Descriptions

### **MAT 231 | ANALYTIC GEOMETRY AND CALCULUS II (4)**

**SUN** **MAT 2230**

*Transferable Course | Four lecture*

*Prerequisite: Successful completion of MAT 221 with a grade of "C" or better.*

A study of calculus including techniques of integration, applications of the definite integral, Analytic Geometry, polar coordinates, indeterminate forms, and improper integrals, Taylor polynomials and sequences and series.

### **MAT 241 | ANALYTIC GEOMETRY AND CALCULUS III (4)**

**SUN** **MAT 2241**

*Transferable Course | Four lecture*

*Prerequisite: Completion of MAT 231 with a grade of "C" or better.*

A study of vectors, the geometry of space, vector-valued functions, functions of several variables, partial differentiation, gradients, multiple integration and vector analysis.

### **MAT 260 | INTRODUCTION TO DIFFERENTIAL EQUATIONS (4)**

**SUN** **MAT 2262**

*Transferable Course | Four lecture*

*Prerequisite: Completion of MAT 241 with a grade of "C" or better.*

Solutions of first order differential equations, nth-order linear equations, systems of linear differential equations, series solutions of second-order linear equations, Laplace transforms, nonlinear differential equations and stability.

## **MEDICAL ASSISTING**

### **MEA 100 | MEDICAL LAW AND ETHICS (3)**

**Three lecture**

*Prerequisite: Appropriate assessment score or successful completion of PCS 021 and TRE 089.*

Introduces students to the legal, moral, and ethical issues that arise within the medical community. Included is an overview of the laws and ethics that relate to patient care as well as application and practice through the use of case studies and other simulated exercises.

### **MEA 101 | BASIC PHLEBOTOMY TECHNIQUES (4)**

**Course Fee: \$45 | Two lecture; four lab.**

*Prerequisites: Successful completion of HES 113, HES 129 or concurrent enrollment, PCS*

*021 or appropriate score on assessment test. Must be able to safely draw blood from patients (no medications or other problems that may cause a safety issue.)*

Studies blood collection techniques including vacutainer systems, syringe draws, butterfly draws, heel sticks, and capillary punctures. Basic knowledge and skills necessary for the safe and successful collection of blood specimens are discussed. Also includes other specimen collections for body fluids as well as the impact of drug testing. Prepares the student to write the national certification examination for Phlebotomists.

### **MEA 102 | PHLEBOTOMY EXTERNSHIP (3)**

**Course Fee: \$45 | Six lab.**

*Prerequisite: Successful completion of MEA 101 within one calendar year.*

Application of phlebotomy techniques in the clinical setting. The course provides the student the opportunity of practical experience in a health care setting. Student must complete 100 successful blood draws.

### **MEA 105 | MEDICAL OFFICE MANAGEMENT WITH COMPUTER APPLICATIONS (3)**

**Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Provides a basic understanding of the administrative duties and responsibilities pertinent to medical offices. Includes instruction in medical correspondence and records, case histories of patients, filing, telephone procedures, appointment scheduling, receptionist duties, and processing mail. Familiarizes the student with computer applications in the health care setting. Provides the student with basics of operations and applications of computer usage within the health care provider office.

### **MEA 115 | BASIC ELECTROCARDIOGRAPH TECHNIQUES (3)**

**Course Fee: \$30 | Three lecture**

*Prerequisite: Successful completion of HES 113.* Presents the rationale and related theory for obtaining an electrocardiogram including anatomy and physiology, procedural technique and equipment utilized. Introduces basic rhythm analysis including recognizing standard electrical waves and accurately measuring each normal sinus rhythm and

basic arrhythmias. Basic cardiac pharmacology and treatment modalities are discussed.

### **MEA 116 | ELECTRONIC MEDICAL RECORDS (3)**

**Three lecture**

*Prerequisite: Successful completion of HES 113, CIS 131 or concurrent enrollment in CIS 131.*

Provides the necessary rationale, functions, and practical applications of the electronic health record. Hands-on approach to entering, utilizing and producing reports from the record.

### **MEA 140 | MEDICAL CODING (3)**

**Three lecture**

*Prerequisite: Successful completion of HES 113 and HES 129*

Provides an overview of medical coding using CPT, ICD and HCPCS manuals and insurance reports as applied to the medical office.

### **MEA 141 | MEDICAL BILLING (3)**

**Three lecture**

*Prerequisite: Successful completion of HES 113.*

An overview of medical insurance programs and the skills needed in handling insurance forms and insurance reports as applied to the medical office. Includes simulated computer data entry for patient records, procedure and diagnostic codes, insurance processing and electronic transmission of claims.

### **MEA 150 | CLINICAL I (3)**

**Course Fee: \$40 | Two lecture; two lab**

*Prerequisite: Successful completion of HES 113 and HES 129*

Covers the competencies required of a medical assistant in the clinical setting, including patient screening, vital signs, basic assessments, medical aseptic techniques, physical therapy and emergency situations. The scope of practice of the medical assistant, as well as learning how to work as part of a team in the medical office will be emphasized throughout the course.

### **MEA 203 | DISEASE CONDITIONS (3)**

**Three lecture**

*Prerequisite: Successful completion of HES 113 and HES 129*

Presents the basic concepts of diseases, their courses, pathologies, and functional disturbances as they relate to body systems. Includes the precipitating risk factors and

appropriate methods of patient education regarding various disease processes.

### MEA 230 | CLINICAL II (3)

**Course Fee: \$40 | Two lecture; two lab**

*Prerequisite: Successful completion of HES 113, HES 129 and MEA 150*

*Corequisite: MEA 249*

Covers the competencies required of a medical assistant in the clinical setting, including phlebotomy, pulmonary testing and electrocardiograms. Administering medications, injections, and assisting with diagnostic and minor surgery procedures will be examined. The scope of practice of the medical assistant, as well as learning how to work as part of a team in the medical office will be emphasized throughout the course.

### MEA 249 | LABORATORY TECHNIQUES (4)

**Course Fee: \$50 | Two lecture; four lab.**

*Prerequisite: Successful completion of HES 113, HES 129 and MEA 150*

*Corequisite: MEA 230.*

This advanced course prepares students to understand and perform basic laboratory procedures. This includes fundamental principles of medical lab practice, disposal of biohazardous materials, specimen collection, use of methods of quality control, urinalysis testing, chemistry testing, hematology testing, immunology testing, microbiology testing and discussion of follow up testing results.

### MEA 258 | MEDICAL ASSISTING EXTERNSHIP (5)

**One lecture; six lab.**

*Prerequisite: Successful completion of ALL Medical Assisting core coursework and permission of Academic Chair or Program Coordinator.*

A comprehensive practicum providing actual experience in front and back office areas in a medical setting. Emphasis is on application of knowledge and skills developed in the Medical Assistant Program. Students must spend a minimum of 90 hours in the clinical setting and 90 hours in the office setting. Students should not take this course until their last semester in the program.

### MEA 260 | MEDICAL ASSISTING REVIEW (3)

**Three lecture**

*Prerequisite: Successful completion of MEA 249; this course is taken the last semester of*

*the program.*

*Corequisite: MEA 258*

Provides an overview of the entire Medical Assisting competencies for the student to review prior to sitting for their national exam for certification. Reviews the theory in general knowledge, administrative knowledge, and clinical knowledge as they relate to the examination. Multiple mock exams will be administered.

## MUSIC

### MUS 101 | APPRECIATION AND LITERATURE OF MUSIC (3)

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of TRE 089.*

A general introduction to music literature with emphasis upon the development of listening techniques. An historical and cultural background of music and analysis of select representative works from each era.

### MUS 102 | FUNDAMENTALS OF MUSIC (2)

*Transferable Course | Two lecture*

A study of the basic elements of music, including the staff, clefs, time and key signatures, notation, rhythm, scales, definitions, ear training and sight singing, and a basic introduction to the keyboard.

### MUS 211 | COLLEGE CHOIR (1)

*Transferable Course | Three lab.*

Open to all students in the college and interested singers in the community. Course content includes preparation and performance of the larger choral works. May be repeated for credit.

## NURSING

### NUR 115 | NURSING ASSISTANT (6)

**Course Fee: \$150 | Five lecture; three lab.**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and Healthcare Provider level CPR.*

A comprehensive course to provide students with knowledge, skills and attitudes necessary to perform in the role of nursing assistant or home health aide. Principles of human biological sciences, communications, nutrition and nursing science are incorporated throughout. Students will be able to provide personal care services and

assistance with activities of daily living to patients within a clinical setting. Clinical practice is arranged with local health care agencies. Call the nursing office for Nursing Assistant physical examination requirements.

### NUR 117 | MEDICATION ASSISTANT COURSE (6)

**Course Fee: \$100 | Five lecture; three lab.**

*Prerequisites:*

*Worked as a certified nursing assistant for at least 6 months as a full time employee; have no outstanding complaints or restrictions on CNA certification;*

- *Is at least 18 years old;*

- *Pass a screening math and reading comprehension test;*

- *Earned a high school diploma, GED or U.S. college or U.S. military credits or 12 years of education in an foreign country;*

*If educated in a non-English speaking country, a score of 76 on the iBT (internet-based TOEFL) or 6.5 overall and 7.0 on the speaking portion of the International English Language Test Service Academic Examination (IELTS)*

This course provides basic background information and routine procedures that are essential for the safe administration of selected medications by experienced certified nursing assistants in a long term care facility. Content includes basic principles of medication administration, simple calculations and categories of medications. Successful completion of the course and a "pass" on both the written and manual skills exam administered by the Arizona State Board of Nursing (AZBN) will meet the qualifications to become a certified medication assistant (CMA) and administer medications under the provisions of A.R.S. §32-1650, (Certified medication assistants; medication administration; delegation, at a long-term care facility under the supervision of a licensed nurse).

### NUR 121 | NURSING I (8)

*Transferable to ASU & NAU |*

**Five lecture; nine lab.**

*Prerequisite: Admission to Nursing Program.* An 8-credit-course that focuses on the fundamental concepts of contemporary professional nursing. The emphasis of this course is on the student's development as a caring, competent nurse within the legal/ethical and scientific frameworks of the profession. Critical thinking and communication skills

## Course Descriptions

are stressed. Using the transitions “model,” students learn to provide nursing care for individuals undergoing situational transitions in well-defined practice settings. Situational transitions include that of the individual to the nursing student role and the patient’s admission to and movement within the healthcare system. Concepts of nutrition, pathophysiology and pharmacology are integrated.

### **NUR 122 | NURSING II (8)**

*Transferable Course | Four lecture; 12 lab.*  
*Prerequisite: Successful completion of NUR 121.* Within the framework of transitions, the focus is on nursing care to promote healthy transitions for individuals and families with chronic health conditions in well-defined practice settings. Emphasis is on basic management concepts and continued development of critical thinking, clinical judgment and skills. Principles of pharmacology, culture and nutrition are integrated throughout the course.

### **NUR 123 | TRANSITION TO PRACTICAL NURSING (3)**

**Course Fee: \$50 | Two lecture; two lab**  
*Prerequisite: Successful completion of NUR 122.* The focus of this course is a scope of practice issues specific to the practical nurse, including care of individuals and families experiencing developmental and health-illness transitions. Concepts of clinical judgment, pathophysiology, pharmacology, and nutrition are integrated. This course also includes practical nurse level concepts of management and supervision.

### **NUR 135 | L.P.N. REFRESHER (6)**

**Course Fee: \$100 | Three lecture; nine lab.**  
*Prerequisite: Either Arizona L.P.N. license in good standing or ability to obtain temporary AZ LPN license and current CPR card.* Designed for the Licensed Practical Nurse to update knowledge and skills of current nursing practice. There are 10 self-paced learning modules and a final examination that must be completed on-line prior to the clinical experience. During the 120 hours of mandated clinical experience, the LPN student functions under the supervision of a Registered Nurse preceptor. There is 6 months allotted time to finish the course If the student registers the first week the class is available.

### **NUR 136 | L.P.N. INTRAVENOUS ADMINISTRATION (3)**

**Three lecture**  
*Prerequisite: Current L.P.N. license or permission of the Nursing Director.* This course prepares the licensed practical nurse to be able to start intravenous lines and add selective pre-mixed medications and solutions to pre-existing intravenous peripheral lines and peripheral heparin or saline wells.

### **NUR 137 | ARTICULATION TO HEALING COMMUNITY (3)**

**Course Fee: \$100 | Three lecture**  
*Prerequisite: Current L.P.N. license or permission of the Nursing Director.* Designed for the L.P.N. to update knowledge and skills preliminary to entering the ADN program and articulation into Healing Community Curriculum. There are nine self-paced learning modules that must be completed during the 15-week semester and one visit to nursing lab to demonstrate selected skills.

### **NUR 140 | CARDIOVASCULAR DRUG UPDATE (1)**

**One lecture**  
*Prerequisite: R.N., L.P.N., current nursing student or permission of the Nursing Director.* This class is designed to examine the actions, side effects and uses of common and new cardiovascular system drugs.

### **NUR 141 | NEUROLOGICAL DRUG UPDATE (1)**

**One lecture**  
*Prerequisite: R.N., L.P.N., current nursing student or permission of the Nursing Director.* This class is designed to examine the actions, side effects and uses of common and new neurological system drugs.

### **NUR 142 | RESPIRATORY AND GI DRUG UPDATE (1)**

**One lecture**  
*Prerequisite: R.N., L.P.N., current nursing student or permission of the Nursing Director.* This class is designed to examine the actions, side effects and uses of common and new respiratory and gastrointestinal system drugs.

### **NUR 143 | CHEMOTHERAPY ADMINISTRATION (1)**

**One lecture**  
*Prerequisite: R.N., L.P.N., current nursing student or permission of the Nursing Director.*

This class is designed to examine the actions, side effects and uses of common and new chemotherapeutic agents used in the treatment of cancer.

### **NUR 150 | TRANSITION TO NURSING I (3)**

**Three lecture**  
*Prerequisite: Admission to the Paramedic to RN track of MCC Nursing Program.* Focuses on the principles of fundamentals of nursing. It addresses scope of practice issues specific to the nursing profession. The emphasis of this course is on the student’s development as a caring, competent nurse within the legal/ethical framework of the profession, using critical thinking and communication skills. Using the “transitions” model, the focus is on caring for individuals in well defined practice settings. Situational transitions include that of the individual to the nursing student role and the client’s admission to and movement within the healthcare system. Concepts of nutrition and pharmacology are integrated.

### **NUR 175 | TRANSITION TO NURSING II (9)**

**Five lecture ; twelve lab.**  
*Co-requisite: NUR 175L.* Within the framework of transitions, the focus is on nursing care to promote healthy transitions for individuals and families with chronic health conditions in well-defined practice settings. Situational transitions of the individual to the nursing student role and the client’s admission to and movement within the healthcare system are included. Concepts of nutrition and pharmacology are integrated. Emphasis is on the student’s development as a caring, competent nurse within the legal/ethical framework of the profession, using critical thinking, communication and time management skills. Principles of pharmacology, nutrition and pathophysiology are integrated throughout the course.

### **NUR 221 | NURSING III (8)**

*Transferable Course*  
**Four lecture ; twelve lab.**  
*Prerequisite: Successful completion of NUR 122 or L.P.N. plus completion of NUR 137.* Within the framework of transition, the focus is on nursing care to promote healthy transitions for individuals and families experiencing developmental milestones.

Includes the transition of birth, childhood, adolescence, young adulthood, childbearing and middle adulthood. The student's transition to nurse includes group theory and nursing therapeutics when assisting the client through acute health care issues. Topics of nutrition, culture, and pharmacology are integrated. Concepts in critical thinking, organizational skills and psychosocial nursing are included.

## **NUR 222 | NURSING IV (8)**

*Transferable Course*

**Four lecture ; twelve lab.**

*Prerequisite: Successful completion of NUR 221.*

Focus is on the impact of acute health/illness transitions on individuals, families and groups. Emphasis is on syntheses and applications of nursing therapeutics in the transition of students to their role in the profession of nursing with an introduction to organizational transitions. Concepts of nutrition, pharmacology, pathophysiology and nursing therapeutics are integrated.

## **NUR 225 | TRANSITION TO NURSING III (1)**

**One lecture**

*Prerequisite: Successful completion of NUR 150 and NUR 175.*

*Corequisite: NUR 221 Nursing III*

Designed to assist the Paramedic-to-RN students in their transition from nursing student to licensed practical nursing. This course is mandatory for the Paramedic to RN track student and offers options of alternative study within the course if LPN licensure is not desired.

## **NUR 227 | PHARMACOLOGY FOR NURSING (3)**

**Three lecture**

*Prerequisite: Successful completion of NUR 121, LPN or Paramedic Licensure or permission of instructor.*

Pharmacology for Nursing is a three (3) credit course provided either online or regular classroom attendance for nursing students who have completed NUR 121. This course is appropriate for student nurses who have completed at least the first semester of the nursing program or for LPN's or Paramedics returning to complete a transition program to RN. Prerequisite is successful completion of NUR 121 or LPN or Paramedic licensure with intention of enrollment in nursing courses beyond NUR121

or permission of the instructor. This course will review common drug classifications, actions, uses, and side effects of pharmacological agents. Accurate calculation of dosages, administration techniques, legal/safety considerations and nursing implications of common medications will be emphasized.

## **NUR 228 | PHARMACOLOGY FOR NURSING SPECIALITIES: MENTAL HEALTH, PEDIATRICS, OBSTETRICAL NURSING (1)**

**One lecture**

*Prerequisite: NUR 121; NUR 122, NUR 227, LPN or Paramedic Licensure or permission of instructor*

*Co-requisite: NUR 221*

Pharmacology for Nursing Specialties is a one (1) credit course provided on ground/online for nursing students who have completed NUR 121 Nursing I, NUR 122 Nursing II and NUR 227 Pharmacology and who are currently enrolled in NUR 221 Nursing III. Licensed Practical Nurses and Paramedics taking NUR 221 Nursing III are also required to take this course. This course will review common drug classifications as well as actions, uses, and side effects of pharmacological agents in the specialties area of Mental Health, Pediatrics, Reproductive and Obstetrical Nursing. Accurate calculation of dosages, administration techniques, legal/safety considerations and nursing implications of common specialty medications will be emphasized.

## **NUR 229 | ADVANCED PHARMACOLOGY FOR NURSING (1)**

**Course Fee: \$100 | Six lecture; nine lab.**

*Prerequisite: NUR 121, NUR 122, NUR 221, NUR 227*

*Co-requisite: NUR 222*

Advanced Pharmacology for Nursing is a (1) credit course provided either online or regular classroom attendance for nursing students that are concurrently enrolled in NUR 222. Prerequisite is successful completion of NUR 121, NUR 122, NUR 221, NUR 227, and NUR 228. This course will review common drug classifications, indications, actions, and side effects of pharmacological agents commonly utilized in the acute care setting. Accurate calculation of dosages using three factor dimensional analysis, significant laboratory tests, and monitoring parameters will be emphasized.

## **NUR 235 | REGISTERED NURSE REFRESHER (9)**

**Course Fee: \$100 | Six lecture; nine lab.**

*Prerequisite: Either Arizona R.N. license in good standing or ability to obtain a temporary AZ RN license for the purpose of the refresher course; current CPR card.*

This program is designed to assist the registered nurse to update knowledge and clinical practice. There are 12 self-paced modules and 160 hours of clinical practicum required. The modular format allows the student to work at their own pace with a faculty coordinator to answer questions. The student is required to secure a clinical preceptor prior to registration and signing course agreement.

## **NUR 245 | GRADUATE NURSING REVIEW (2)**

**Two lecture**

*Prerequisite: Successful completion of NUR 222*

This course is designed to provide a comprehensive review for the graduate in preparation for the RN licensure examination. The course focus is review of the essential content areas which are tested.

## **NUR 275 | TRANSITION TO NURSING IV (2)**

**Two lecture**

*Prerequisite: Successful completion of NUR 221 and NUR 225.*

*Corequisite: Successful completion of NUR 222.* Designed to assist the Paramedic-to-RN students in their transition from nursing student to registered nurse. This course is mandatory for the Paramedic to RN track student and its focus is on use of nursing process in clinical decision-making.

## **NUTRITION**

### **NUT 203 | HUMAN NUTRITION IN HEALTH AND DISEASE (3)**

*Transferable Course | Three lecture*

Nutritional principles and the scientific use of diet in health and disease throughout the life cycle.

## **PARALEGAL**

### **PAR 101 | LEGAL RESEARCH AND WRITING I (3)**

**Three lecture**

*Prerequisite: Appropriate score on assessment*

## Course Descriptions

test or successful completion of PCS 021 and TRE089.

Introductory principles and procedures for conducting legal research and techniques for basic legal writing. Includes categories of research materials, proper citing of legal material, finding and using secondary authority, Shepard's Citations, case law, constitutions, statutes and administrative law. The analysis of research topics and the preparation of research reports, basic letter writing, and legal memorandums will also be covered.

### **PAR 102 | INTRODUCTION TO PARALEGAL CAREERS (3)**

#### **Three lecture**

*Prerequisite: Successful completion of or concurrent enrollment in PAR 101*

Role, responsibilities and ethical standards of the paralegal profession. Includes paralegal employment and regulation, ethical rules of the legal profession, law office administration, communication, legal research and analysis, state and federal judicial systems, and an overview of litigation and specialty areas of law.

### **PAR 103 | LEGAL ETHICS FOR PARALEGALS (3)**

#### **Three lecture**

*Prerequisite: Successful completion of or concurrent enrollment in PAR 101*

Rules and principles of professional responsibility in the legal field. Includes rules of legal ethics, ethical guidelines, attorney supervision of paralegals, unauthorized practice of law, confidentiality, conflict of interest, advertising and solicitation, attorneys' fees and fiduciary duties, competence, malpractice, ethical conduct issues in litigation, and professional integrity issues.

### **PAR 104 | CIVIL LAW AND LITIGATION (3)**

#### **Three lecture**

*Prerequisite: Successful completion of or concurrent enrollment in PAR 101*

Covers the definition of civil versus criminal law. Case filing and initial pleadings and procedures will be discussed. An overview of discovery/disclosure procedures in Federal Court, and in Arizona Superior Court will also be covered. This course covers the procedures involved in the discovery and trial preparation stages of civil litigation, file organization and document control, pre-tri-

al motions, the gathering and organizing of evidence, the preparation of witnesses, alternative dispute resolutions, trial, post-trial and appellate procedures will be covered.

### **PAR 105 | CONTRACT LAW (3)**

#### **Three lecture**

*Prerequisite: Successful completion of or concurrent enrollment in PAR 101*

Provides students with a comprehensive understanding of the common law of contracts, from the formation of a contract through its termination, including the several ways a contract can be entered, considerations, offer and acceptance, mutual assent and defective agreement, contractual capacity, legality, the statute of frauds and discharge and remedy. Additionally, this course will familiarize the students with the Uniform Commercial Code and the law governing the sale of goods.

### **PAR 106 | CRIMINAL LAW AND PROCEDURE (3)**

#### **Three lecture**

*Prerequisite: Successful completion of or concurrent enrollment in PAR 101*

Criminal law and trial processes from arrest through pre-trial procedures. Includes rules of criminal procedure, initial criminal law process, pre-trial investigation and discovery, criminal and constitutional law cases, criminal statutes, and pre-trial motion practice, trial rights of defendants, trial procedure, case preparation for trial, direct and cross examination, evidentiary objections, and motions for the close of evidence.

### **PAR 107 | TORT LAW (3)**

#### **Three lecture**

*Prerequisite: Successful completion of or concurrent enrollment in PAR 101*

Concepts and procedures used in tort law cases. Includes tort litigation procedures and tort case law in the areas of negligence, professional negligence, strict liability, product liability, liability issues, and insurance coverage. Also includes interviewing and investigation techniques for the legal assistant in tort cases.

### **PAR 108 | PROPERTY LAW AND REAL ESTATE TRANSACTIONS (3)**

#### **Three lecture**

*Prerequisite: Successful completion of or concurrent enrollment in PAR 101 and PAR 102*  
Legal procedures and requirements in real

estate transactions and litigation. Includes real estate principles and legal concepts, recording and constructive notice, and real property taxes. Also includes an analysis of real estate contracts/purchase agreements, escrows and closings, deeds, co-ownership, legal descriptions, leases, encumbrances, liens, and foreclosures.

### **PAR 200 LAW OFFICE TECHNOLOGY (3)**

#### **Three lecture**

*Prerequisite: Successful completion of at least four (4) 100-level courses, including PAR 101*

Application of computer software programs in the legal field. Includes computer hardware and software, electronic research, word processing applications, database management systems, spreadsheet software, automated litigation support, law office management, electronic discovery, and specialized legal software for the preparation and filing of legal documents.

### **PAR 201 | LEGAL RESEARCH AND WRITING II (3)**

#### **Three lecture**

*Prerequisite: Successful completion of PAR 101*

More advanced principles and techniques of legal research and writing. Students will learn to conduct legal research using online research resources. Includes writing style, editing and proofreading, legal analysis, legal brief types, and applications of legal writing for memorandum, litigation documents, correspondence, and transaction documents.

### **PAR 202 | WILLS, TRUSTS, AND ESTATES (3)**

#### **Three lecture**

*Prerequisite: Successful completion of at least four (4) 100-level courses, including PAR 101.*

Preparation to assist a lawyer in estate planning. Includes an introduction to wills, trusts and estates, intestate succession, guardianships, will-related documents, will drafting and execution, estate administration, probate related legal action, trusts and administration, and fiduciary duties.

### **PAR 203 | FAMILY LAW (3)**

#### **Three lecture**

*Prerequisite: Successful completion of at least four (4) 100-level courses, including PAR 101.*

Law and procedures related to family relationships and domestic matters. Includes basic principles of family law, marital con-

tracts, legal issues in family law affecting children, initiating a divorce proceeding, contested proceedings, and assisting at a dissolution trial.

## **PAR 204 | CORPORATION LAW (3)**

### **Three lecture**

*Prerequisite: Successful completion of at least four (4) 100-level courses, including PAR 101.* Procedures and document drafting for the formation of business entities, business corporations, corporation changes, forms of corporations, financing a corporation, changes in corporate structure, and the role of the paralegal in corporate law.

## **PAR 205 | BANKRUPTCY (3)**

### **Three lecture**

*Prerequisite: Successful completion of at least four (4) 100-level courses, including PAR 101.* Application of legal procedures in bankruptcy. Includes jurisdiction, cast of characters and their roles in bankruptcy, client interview, evaluation of options, advising clients, and drafting Chapter 7 liquidation, Chapter 13 adjustment of debts of individuals, Chapter 12 adjustment of debts of family farmer, Chapter 11 reorganization, and the paralegals' roles.

## **PHARMACY TECHNOLOGY**

### **PHT 170 | INTRODUCTION TO PHARMACY TECHNOLOGY (2)**

#### **Two lecture**

*Prerequisite: Appropriate score on the assessment test or successful completion of PCS 021, TRE 089 and TRM 091.*

Overview of the role of pharmacy support personnel. Includes allied health professions, history and structure of pharmacy, and legal aspects of pharmacy. Also includes medical terminology emphasizing common medical roots, prefixes and suffixes, and pharmaceutical abbreviations.

### **PHT 171 | PHARMACEUTICAL CALCULATIONS (4)**

#### **Course Fee: \$50 | Three lecture; two lab**

*Prerequisite: PHT 170 or concurrent enrollment.* Mathematical computations needed in the practice of pharmacy technology. Includes fundamentals of mathematical calculations, units, and measures for the calculation of drug dosages, and interpretation of the pre-

scription or medication order. Also includes calculation of drug dosages, reducing and enlarging formulas, percentage preparations, dilution and concentration, isotonic solutions, and electrolyte solutions.

### **PHT 172 | DRUG THERAPY I (4)**

#### **Four lecture**

*Prerequisite: PHT 170 or concurrent enrollment.* Overview of the relationship between the central nervous system (CNA), the autonomic nervous system (ANS) and pharmaceutical therapy. Includes anatomy and physiology of the CNS, neurotransmission and disorders of the CNS, therapeutic applications of drugs affecting the CNS, and characteristics of drugs of the CNS. Also includes anatomy and physiology of the ANS, drug action on ANS neurotransmission, disorders treated with autonomic drugs, and types and characteristics of autonomic drugs.

### **PHT 174 | PHARMACY OPERATIONS (3)**

#### **Course Fee: \$66 | Two lecture; two lab**

*Prerequisite: Successful completion of PHT 171*  
*Co-requisite: PHT 174L*

Technical aspects of drug distribution in both inpatient and outpatient settings. Includes basic pharmacy references, equipment and materials, non-sterile dosage forms, and inventory control. Also includes large and small scale compounding, packaging, and quality control.

### **PHT 178 | PHARMACY MICROCOMPUTERS (3)**

#### **Three lecture**

*Prerequisite: Successful completion of PHT 170* Basic concepts of computer operation and the professional applications of computers in retail and hospital pharmacies.

### **PHT 180 | STERILE PRODUCTS (4)**

#### **Course Fee: \$71 | Three lecture; two lab**

*Prerequisite: Successful completion of PHT 171.*  
*Corequisite: PHT 180L*

Application of aseptic techniques and use of the laminar flow hood in the preparation of sterile products.

### **PHT 181 | INTERPROFESSIONAL RELATIONS IN PHARMACY (3)**

#### **Three lecture**

*Prerequisite: PHT 170 or concurrent enrollment.* Overview of effective communication skills needed by the pharmacy technician to use interpersonally and between the pharmacist,

the patient, and other health care professionals. Includes human relations development, personality inventory, and elements in communication in areas of non-verbal, interpersonal, barriers, listening, empathy, and interviewing. Also includes building better patient understanding in special situations such as death and dying, ethnicity, conflict resolution, and ethical patient care.

### **PHT 182 | DRUG THERAPY II (4)**

#### **Four lecture**

*Prerequisite: Successful completion of PHT 172* The relationship between the anatomy and physiology, disease states, and pharmaceutical therapy as they relate to the cardiovascular, renal, endocrine, respiratory, digestive, reproductive and integumentary systems.

### **PHT 187 | PHARMACY LAW AND ETHICS (3)**

#### **Three lecture**

*Prerequisite: PHT 170 or concurrent enrollment.*

Practical guide to pharmacy law and ethics for the pharmacy technician. Includes state and federal law, roles of the pharmacist and the pharmacy technician, and ethical practices for patients.

### **PHT 189 | PHARMACY TECHNICIAN ADMINISTRATION (3)**

#### **Three lecture**

*Prerequisite: Completion of the core curriculum for the certificate.*

Practical management techniques for pharmacy technician supervisors and managers. Includes building an organization from the beginning stages. Also includes managing and maintaining the organization.

### **PHT 190 | PHARMACY TECHNICIAN INTERNSHIP (4)**

#### **Eight lab.**

*Prerequisite: Completion of the core curriculum for the certificate.*

On-site training in outpatient and inpatient pharmacy services under direct supervision of a designated pharmacist.

## **PHILOSOPHY**

### **PHI 101 | INTRODUCTION TO PHILOSOPHY (3) PHI 1101**

*Transferable Course | Three lecture*

*Prerequisites: Appropriate score on assessment*

## Course Descriptions

test or successful completion of PCS 021 and TRE 089

An introduction to the major philosophers (ancient, modern, and contemporary), history, theoretical perspectives, and central topics in the discipline of philosophy. Topics covered include human nature, reality and being, the existence of God, truth, ethics, sources of knowledge, social philosophy, the meaning of life, and other philosophical topics.

### PHI 151 | ETHICS (3)

#### PHI 110S

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

The principle problems of moral and social philosophy are studied.

### PHI 205 | COMPARATIVE WORLD RELIGIONS (3)

*Transferable Course* | **Three lecture**

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

Includes a study of the 11 major religions in the world today, together with background material in primitive and bygone religions; comparison of the major doctrines of these religions; the development of the doctrines; and the influence they have upon one another.

## PHYSICAL THERAPIST ASSISTANT

### PTA 101 | SURVEY OF PHYSICAL THERAPY (3)

**Three lecture**

*Prerequisite: Appropriate score on the assessment test or successful completion of TRE 089 and TRM 091. Admission to the PTA Program*

The History of Physical Therapy is studied. The purpose, benefits, and goals of the Arizona and American Physical Therapy Associations (APTA) are discussed. Roles and responsibilities of physical therapists (PT) and physical therapist assistants (PTA) are scrutinized.

### PTA 103 | KINESIOLOGY (4)

**Three lecture; Three lab.**

*Prerequisite: Appropriate score on the assessment test or successful completion of TRE 089 and TRM 091. Admission to the PTA Program*

*Corequisite: Concurrent enrollment in PTA 101 and PTA 103.*

Emphasis on structure, movement, and stability of specific joints are studied. Theory and principles of goniometry and manual muscle testing is reviewed. Normal range of motion of the spine and extremities is examined. Palpation of bony and soft tissue structures is practiced.

### PTA 200 | PATIENT MOBILITY TECHNIQUES (4)

**Two lecture; six lab.**

*Prerequisite: Appropriate score on the assessment test or TRE 089 and TRM 091*

*Admission to the PTA Program.*

*Corequisite: Concurrent enrollment in PTA 101 and PTA 103.*

Theory, principles and practice of proper body mechanics and safety is discussed. Principles and techniques of gait training, therapeutic exercise, patient bed mobility and transfers and wheelchair mobility is practiced.

### PTA 202 | PHYSICAL THERAPY MODALITIES (5)

**Three lecture; six lab.**

*Prerequisite: Successful completion of PTA 101, PTA 103, PTA 200*

*Corequisite: Concurrent enrollment in PTA 203, PTA 205 and PTA 214.*

Stages of inflammation responses and tissue repair are studied. Theories on pain are investigated. Application and documentation of superficial heat and cold, ultrasound, electromagnetic radiation, massage, hydrotherapy, light intermittent venous compression, and traction are practiced. Indications and contraindications for treatment methods are scrutinized.

### PTA 203 | CLINICAL PATHOLOGY (3)

**Three lecture**

*Prerequisite: PTA 101, PTA103, PTA 200*

*Corequisite: Concurrent enrollment in PTA 202, PTA 205 and PTA 214.*

Pathologic terminology and definitions are explored. Specific disease processes specific to physical therapy are studied. Functional anatomy, select medical tests for diagnosis, and medication and effects on therapy are evaluated.

### PTA 205 | COMMUNICATION IN PHYSICAL THERAPY (2)

**Two lecture**

*Prerequisite: Successful completion of PTA 101, PTA 103, PTA 200*

*Corequisite: Concurrent enrollment in PTA 202, PTA 203 and PTA 214.*

Communication skills in the physical therapy setting are examined. Active listening, responding to problems, body language, patient interview skills is practiced. Communicating with persons with disabilities is reviewed. Cultural differences in communication and views of Health Care are introduced.

### PTA 206 | CLINICAL PRACTICUM I (4) 160 clinical hours.

*Prerequisite: Successful completion of PTA 101-205 and PTA 214. Approval of program director.*

PTA students have the opportunity to participate in a clinical experience with maximum supervision. Application of physical therapy skills and techniques are practiced in the clinical setting.

### PTA 208 | REHABILITATION OF SPECIAL POPULATIONS (5)

**Three lecture; six lab.**

*Prerequisite: Successful completion of PTA101 – 206, 214*

*Corequisite: PTA 210, 215, 217*

Clinical applications and treatment of special populations is reviewed. Patients requiring cardiopulmonary rehabilitation, spinal cord injury management, proprioceptive neuromuscular facilitation (PNT), NDT and prosthetics/orthotics training are discussed. Proficiency in "hands on" techniques is practiced.

### PTA 210 | ORTHOPEDIC PHYSICAL THERAPY (4)

**Three lecture; three lab.**

*Prerequisite: Successful completion of PTA101 – 206, 214*

*Corequisite: PTA 208, 215, 217*

Response of human bone and soft-tissue to injury is studied. Orthopedic management and physical therapy procedures for common injuries of the extremities and spine are practiced.

### PTA 214 | ELECTROMODALITIES (3)

**Two lecture; three lab.**

*Prerequisite: Successful completion of PTA 101, PTA 103, PTA 200*

*Corequisite: Concurrent enrollment in PTA 202, PTA 203 and PTA 205.*



Electrical currents for physical therapy are discussed. Biophysical effects of transcutaneous electrical nerve stimulation is explored. Use of low volt, high volt, and interferential electrical stimulation devices is practiced. Use of neuromuscular electrical stimulation (NMES) and use of biofeedback in physical therapy is discussed.

## PTA 215 | WOUND CARE FOR THE PTA (1)

**One lecture**

*Prerequisite: Successful completion of PTA 101-106, PTA 214*

*Corequisite: Concurrent enrollment in PTA 208, PTA 210, PTA 217*

This class introduces current concepts in wound care management techniques for the physical therapist assistant. Skin anatomy and physiology, principles of healing, types of wounds, and therapeutic interventions are studied.

## PTA 217 | CLINICAL NEUROLOGY (2)

**Two lecture**

*Prerequisite: Successful completion of PTA 101-206, PTA 214*

*Corequisite: Concurrent enrollment in PTA 208, PTA 210, PTA 215*

Anatomy and function of the brain, spinal cord, and peripheral nervous system are studied. Evaluation of the motor innervations and spinal tracts are examined. Specific diseases of the central and peripheral nervous systems related to physical therapy are discussed.

## PTA 230 | PHYSICAL THERAPY SEMINAR (2)

**Two lecture**

*Prerequisite: Successful completion of PTA 101-PTA 217*

*Corequisite: Concurrent enrollment in PTA 280 and PTA 290*

Current practices and issues in physical therapy are discussed. Clinical problem solving, ethics, legal aspects, reimbursement, case management and research is explored. Resume preparation and job interviewing skills are practiced. Employment issues are also discussed.

## PTA 280 | CLINICAL PRACTICUM II (5)

**240 clinic hours.**

*Prerequisite: Successful completion of PTA 101-217. Approval of Program Director.*

*Corequisite: PTA 230 and PTA 290*

Physical therapist students have the opportunity to participate in a clinical experience with moderate supervision. Application of physical therapy skills and techniques are practiced in the various clinical settings.

## PTA 290 | CLINICAL PRACTICUM III (5)

**240 clinic hours.**

*Prerequisite: Successful completion of PTA 101-217, PTA 280*

*Corequisite: PTA 230, PTA 280*

Physical therapist assistant students have the opportunity to participate in a clinical experience with minimum supervision working toward entry level. Application of physical therapy skills and techniques is practiced in specific clinical settings.

## PHYSICS

### PHY 107 | CONCEPTUAL PHYSICS (4)

*Transferable Course | Course Fee: \$40*

**Three lecture; Three lab.**

*Prerequisites: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and TRM 091.*

An introduction to the concepts of physics and their applications to real world phenomena. Emphasis will be understanding the phenomena through experience and experiments in physics and not through mathematical manipulations. This course may be used as a science elective by a non-science major and is recommended for those taking General Physics without a strong high school mathematics or science background.

### PHY 111 | GENERAL PHYSICS I (ALGEBRA-BASED) (4)

 **PHY 111**

*Transferable Course | Course Fee: \$40*

**Three lecture; three lab.**

*Prerequisites: Appropriate score on assessment test or successful completion of PCS 021, TRE 089 and MAT 181.*

General Physics I covers the basics of mechanics and thermodynamics using trigonometry to solve problems within these areas. Laboratory explorations provide the opportunity to use the methods and processes of inquiry to analyze concepts studied in the lecture

### PHY 112 | GENERAL PHYSICS II (ALGEBRA-BASED) (4)

 **PHY 112**

*Transferable Course*

**Course Fee: \$40 | Three lecture; three lab.**

*Prerequisite: Successful completion of PHY 111.*

General Physics II is a continuation of PHY 111 with an emphasis on electricity, magnetism and light.

### PHY 115 | UNIVERSITY PHYSICS I (5)

*Transferable Course*

**Course Fee: \$50 | Four lecture; three lab.**

*Prerequisite: Successful completion of MAT 221.*

General physics course using calculus to develop the principles of mechanics and thermodynamics. Recommended for majors in the science and mathematics. Required for engineering majors.

### PHY 116 | UNIVERSITY PHYSICS II (5)

 **PHY 116**

*Transferable Course | Course Fee: \$50*

**Four lecture; Three lab.**

*Prerequisite: Successful completion of PHY 115.*

A continuation of PHY 115 with an emphasis on fluids, electricity, magnetism, light and optics. Recommended for majors in the science and mathematics. Required for engineering majors.

## PLUMBING

### PLU 101 | INTRODUCTION TO PLUMBING (3)

**Course Fee: \$45 | Two lecture; two lab**

*Prerequisite: Successful completion of BTR 105.*

Provides basic skills in the fundamentals of plumbing. Students will be introduced to the trade, safety, building materials, tools, piping process, venting and drains.

### PLU 102 | INTERMEDIATE PLUMBING CONCEPTS (3)

**Course Fee: \$45 | Two lecture; two lab**

*Prerequisites: Successful completion of BTR 105 and PLU 101.*

Provides intermediate-level training in the construction and maintenance field of plumbing. This course provides students with an understanding of: trade math, commercial drawings, piping, drains, valves, fixtures, and water heaters.

## POLITICAL SCIENCE

### POS 100 | ARIZONA CONSTITUTION AND GOVERNMENT (1)

*Transferable Course | One lecture*

## Course Descriptions

Examines the constitution and government of Arizona. Specifically designed to meet the state constitution requirements for teacher certification in Arizona and includes a brief study of the written constitution and the present governmental institutions.

### **POS 120 | AMERICAN NATIONAL GOVERNMENT (3)** **POS 1110**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.*

A survey of the United States government, including the Constitution; political parties and elections; pressure groups; Congress, the President, and bureaucracy; courts; civil rights and liberties; and foreign affairs.

### **POS 227 | UNITED STATES CONSTITUTION (1)**

*Transferable Course | One lecture*

Designed to meet the federal Constitution requirement for teacher certification in Arizona and involves an intensive study of the written Constitution, as well as a survey of the American governmental institutions, which are based upon this document.

## **PRECOLLEGE STUDIES**

### **PCS 010 | PCS ORIENTATION (1)**

**One lecture**

*Prerequisite: Must be at least 16 years of age and not in high school.*

A 15-hour orientation course designed to assess a student's academic competency. Where deficiencies are noted, an individualized program of study will be provided. The orientation will also include instruction concerning learning styles, study skills, goal setting, and time management. The student will be introduced to the Precollege Studies Learning Center and other college facilities designed to encourage student success.

### **PCS 021 | PCS READING (3)**

**Three lecture**

*Prerequisite: Must be at least 16 years of age and not in high school. Successful completion of PCS 010 or appropriate score on TABE or COMPASS.*

Group and individualized instruction prepares students for the GED exam and/or completes the college reading requirement. Areas of study include 0-8 levels of reading

comprehension along with technology and study skills development. Students progress through the course based on a customized education plan which identifies only those areas necessary to study.

### **PCS 022 | PCS COMMUNICATION (3)**

**Three lecture**

*Prerequisite: Must be at least 16 years of age and not in high school. Successful completion of PCS 010 and appropriate score on TABE.*

Group and individualized instruction prepares students for the GED exam. Areas of study include 0-8 levels of written and verbal communications along with technology and study skills development. Students progress through the course based on a customized education plan which identifies only those areas necessary to study.

### **PCS 023 | PCS MATH (3)**

**Three lecture**

*Prerequisite: Must be at least 16 years of age and not in high school. Successful completion of PCS 010 or appropriate score on TABE or COMPASS.*

Group or individualized instruction prepares students for the GED exam OR completes requirements for entrance into Transitional Math 089. Areas of study include 0-8 levels of math along with technology and study skills. Students progress through the course based on a customized education plan which identifies only those areas necessary to study.

### **PCS 033 | GED PREPARATION (3)**

**Three lecture**

*Prerequisite: Must be at least 16 years of age and not in high school. Successful completion of PCS 010 and appropriate score on TABE or failure to pass one or more sections of the Official GED Test.*

Group and individualized instruction prepares students for the GED exam. Areas of study include 9-12 levels of math, reading, writing, social studies, and science along with technology and study skills. Students progress through the course based on a customized education plan which identifies only those areas necessary to study.

## **PSYCHOLOGY**

### **PSY 101 | INTRODUCTORY PSYCHOLOGY (3)** **PSY 1101**

*Transferable Course | Three lecture*

*Prerequisite: Appropriate score on assessment test or successful completion of ENG 101 or successful completion of TRE 089.*

An introduction to the field of psychology, dealing with such topics as the scientific method in psychology, a survey of the different fields of psychology, heredity and environment, intelligence, emotions, motivation, the nervous system, and the learning process.

### **PSY 135 | HUMAN SEXUALITY (3)**

*Transferable Course | Three lecture*

The study of human sexuality with emphasis on anatomy and physiology of the male and female, typical sexual patterns, atypical sexual behaviors, marriage alternatives, birth control methods and current research. The student will gain increased understanding of his or her own sexuality. Designed for the married and unmarried.

### **PSY 234 | SOCIAL PSYCHOLOGY (3)**

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of PSY 101 or SOC 131.*

Explores how social and group factors affect individual behavior. Topics include: social perception, communication, attitudes, attraction, love, sexism, and small group behavior.

### **PSY 240 | CHILD GROWTH AND DEVELOPMENT (3)**

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of PSY 101.*

A study of behavior and development in the child; encompasses genetic, prenatal and postnatal influences. Particular emphasis will be on motivation, perception and learning. Social processes and events affecting the child will also be studied.

### **PSY 245 | LIFESPAN DEVELOPMENT (3)**

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of PSY 101.*

Surveys the continuity of development throughout the lifespan, focusing on physical, intellectual, personal and social development.

### **PSY 260 | INTRODUCTION TO PERSONALITY (3)**

*Transferable Course | Three lecture*

*Prerequisite: Successful completion of PSY 101.*

Focuses on the theories of personality development including psychoanalytic, physiological, trait and cognitive theories. Covers

the major factors that influence personality development including genetics, environmental factors, self-concept, sex roles, and health.

## PSY 270 | ABNORMAL PSYCHOLOGY (3)

*Transferable Course* | **Three lecture**  
*Prerequisite:* Successful completion of PSY 101.  
 Focuses on the historical and current views involved in defining mental illness, the causes of mental illness, and the major types and methods of assessing, treating and preventing mental illness.

## SOCIOLOGY

### SOC 131 | INTRODUCTION TO SOCIOLOGY (3) SOC 1101

*Transferable Course* | **Three lecture**  
*Prerequisite:* Appropriate score on assessment test or successful completion of TRE 089.  
 An introduction to the field of sociology, the scientific study of humans and their behavior in the social context. Topics include conducting research in sociology, sociological theory, culture, socialization, crime and deviance, sex and gender, race and ethnicity, social institutions, organizations, social issues, social movements and change.

### SOC 132 | SOCIAL PROBLEMS IN MODERN SOCIETY (3)

*Transferable Course* | **Three lecture**  
*Prerequisite:* Appropriate score on assessment test or successful completion of TRE 089, SOC 131 (SOC 131 and SOC 132 can be taken concurrently)

The course provides an analysis of contemporary social problems, the potential causes, sociological perspectives on the social problem, how they affect societies (American and global), as well as possible solutions to contemporary social problems.

### SOC 133 | SOCIOLOGY OF DEVIANT BEHAVIOR (3)

*Transferable Course* | **Three lecture**  
*Prerequisite:* Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.

Examines deviant behavior as it develops from human behavior in groups. The class investigates various theories of deviancy, how society views deviant behavior, and ascertains the point of views of deviant groups.

### SOC 136 | MARRIAGE AND FAMILY (3)

*Transferable Course* | **Three lecture**  
*Prerequisite:* Appropriate score on assessment test or successful completion of TRE 089; SOC 131 (SOC 131 and 136 may be taken concurrently).  
 This course explores the aspects of marriage and family primarily in American society, with additional examination of selected cross-cultural issues in marriage and family. Related topics of focus include gender, sexuality, singlehood, cohabitation, communication in relationships, love and finding a partner, marital relationships, diversity in marriage and family relationships, planning for children, parenting, work and the family, domestic violence, crisis in relationships, divorce, remarriage, and relationships in later years.

### SOC 140 | RACE AND ETHNIC RELATIONS (3) SOC 2215

*Transferable Course* | **Three lecture**  
*Prerequisite:* Appropriate score on assessment test for enrollment in ENG 101 or successful completion of PCS 021 and TRE 089; SOC 131 (SOC 131 and SOC 140 may be taken concurrently.)

Examines characteristics of various race and ethnic groups, problematic issues of prejudice, discrimination, and segregation faced by these groups within heterogeneous societies, as well as emphases in encouraging cultural diversity and overcoming exclusion at the local, national, and global level.

## SPANISH

### SPA 101 | ELEMENTARY SPANISH I (4) SPA 1101

*Transferable Course* | **Four lecture**; one lab  
*Prerequisite:* Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.

Develops the fundamental language skills: speaking, listening comprehension, writing and reading comprehension.

### SPA 102 | ELEMENTARY SPANISH II (4) SPA 1102

*Transferable Course* | **Four lecture**; one lab  
*Prerequisite:* Successful completion of SPA 101 or the SPA 101 Challenge Exam.

Develops the fundamental language skills: speaking, listening, comprehension, writing and reading comprehension. A continuation of SPA 101.

### SPA 124 | SPANISH FOR HEALTH CARE PROFESSIONALS (1)

**One lecture**  
 Conversational practice in a medical context. Designed to develop speaking and listening techniques essential for basic medical situations, stressing expressions of courtesy and medical terminology.

### SPA 131 CONVERSATIONAL SPANISH I (3)

*Transferable Course* | **Three lecture**  
 Emphasizes the conversational approach to learning Spanish with conversation built on basic vocabulary, grammar and sentence structure to enable the student to communicate socially, in the workplace or while traveling.

### SPA 201 | INTERMEDIATE SPANISH I (4) SPA 2201

*Transferable Course* | **Four lecture**; one lab  
*Prerequisite:* Successful completion of SPA 102 and enrollment in or completion of ENG 101 or higher.

Reviews, consolidates and increases the basic skills learned in SPA 101 and 102. Emphasis on reading, speaking, listening comprehension, composition and culture. Continued development of communicative competence.

### SPA 202 | INTERMEDIATE SPANISH II (4) SPA 2202

*Transferable Course* | **Four lecture**; one lab  
*Prerequisite:* Successful completion of SPA 201 or permission of academic chair.

A continuation of SPA 201 Emphasis on reading, speaking, listening comprehension, composition and culture. Continued development of communicative competence. Successful completion of course meets fourth semester proficiency requirement.

## STUDENT STUDY SKILLS

### STU 101 | INTRODUCTION TO COLLEGE SUCCESS (1)

**One lecture**  
 Designed to facilitate student success in the college environment. Introductory topics include realistic expectations, learning styles, time management, college resources, listening and study skills, note taking and testing strategies.

## Course Descriptions

### STU 103 | MASTERING SKILLS FOR COLLEGE SUCCESS (3)

#### Three lecture

Designed to enhance students' college readiness skills, including development of successful study habits, learning styles awareness, thinking skills, time management techniques, college resource utilization, listening skills, note taking techniques, testing strategies, establishing appropriate student expectations, and understanding instructor expectations.

## SURGICAL TECHNOLOGY

### SGT 121 | ORIENTATION AND INTRODUCTION TO SURGERY (2)

#### Course Fee: \$360 | Two lecture

*Prerequisite: Admission to Surgical Technology Program*

Designed to provide the student with the skills, knowledge and language necessary to define and evaluate the responsibilities of the OR team and the foundation of good patient care.

### SGT 122 | SURGICAL TECHNIQUES (4)

#### Course Fee: \$720 | Three lecture; three Lab

*Prerequisite: Admission to Surgical Technology Program*

Designed to provide the Surgical Technology student with introduction to surgical procedure and orientation in the role of primary scrub person on selected procedures.

### SGT 123 | PHARMACOLOGY FOR SURGICAL TECHNOLOGY (1)

#### Course Fee: \$180 | One lecture

*Prerequisite: Appropriate standing in Surgical Technology Program and successful completion of HES 113.*

Designed for students who desire to work in the operating room. It will acquaint the student with principles of drug use in the surgical patient and procedures for care and handling of drugs and solutions.

### SGT 125 | MICROBIOLOGY FOR THE SURGICAL TECHNOLOGIST (2)

#### Course Fee: \$360 | Two lecture

*Prerequisite: Admission to Surgical Technology Program*

For students who desire to work in the operating room. Acquaints the student with the history of microbiology and the function of microbes and their relationship to operating room procedures and aseptic techniques.

### SGT 221 | SURGICAL CONCEPTS (2)

#### Course Fee: \$360 | Two lecture

*Prerequisite: Appropriate standing in Surgical Technology Program and successful completion of SGT 121, SGT 122, SGT 125 and BIO 160*  
*Corequisite: Concurrent enrollment in SGT 123 and SGT 222*

Designed to provide clinical experience to refine and develop skills taught in SGT 102 in order to function in the clinical setting. In addition to surgical procedures, this course will include patient care concepts, psychiatric concepts of grief, death and dying, and technical sciences of electricity, physics and robotics in the operating room. Emphasis is on obtaining practical clinical experience.

### SGT 222 - SURGICAL PROCEDURES (6)

#### Course Fee: \$720 | Three lecture; six lab

*Prerequisite: Successful completion of SGT 221*  
Designed to provide the Surgical Technology student with introduction to surgical procedure and orientation in the role of primary scrub person on selected procedures.

### SGT 223 | INTRODUCTION TO THE OPERATING ROOM (2)

#### Course Fee: \$360 | Six lab

Designed to provide the student with an understanding of patient flow through the operating room system. In addition, the student will become acquainted with the functions of other members of the operating team, as well as support staff and Central Sterile processing.

### SGT 224 | SURGICAL COMPLICATIONS (4)

#### Course Fee: \$720 | Four lecture

This course is designed to provide SGT students with a general understanding of the potential complications related to surgical procedures, and the role of the primary SGT in the management of those situations.

### SGT 225 – SURGICAL TECHNOLOGY EXTERNSHIP I (7)

#### Course Fee: \$1,620 | 27 lab | Prerequisite:

*Completion of all SGT 121-SGT 224*

This course takes place in the operating room, with the students actually participating in live surgery. They will be expected to progress from the level of a novice to that of a student with basic skills in surgery. The emphasis will be on basic specialties, including General, OB/Gyn and Orthopedic procedures. The student will also receive

more detailed instruction in the Central Sterile Supply section.

### SGT 226 – SURGICAL TECHNOLOGY EXTERNSHIP II (7)

#### Course Fee: \$1,980 | Two lecture; 27 lab

*Prerequisite: Completion of SGT 121-SGT 225*

This course also takes place in the operating room, with the student having the opportunity to hone their skills to those of an entry level surgical technologist. In addition to continuing their education in the basic specialties, they will have exposure to Urology, Vascular Surgery, Cardiothoracic, Ophthalmology, and other specialties where available.

## THEATRE

### THE 111 | THEATRE PRODUCTION I (4)

*Transferable Course | Eight lab*

Includes techniques of speech and movement on the stage, pantomime, character analysis and participation in laboratory scenes and department production.

### THE 112 | THEATRE PRODUCTION II (4)

*Transferable Course | Eight lab*

*Prerequisite: Successful completion of THE 111 and an audition.*

Theatre Production II and Theatre Production III present an amplification of Theatre Production I rather than a sequential advancement in instruction. In all three courses, students are involved in every aspect of theatre production, and the intermediate and advanced levels outlined in THE 112 and THE 113, respectively, represent an increasingly sophisticated level of the students' involvement in those aspects of theatre production.

### THE 113 | THEATRE PRODUCTION III (4)

*Transferable Course | Eight lab*

*Prerequisite: Successful completion of THE 112.*

Theatre Production II and Theatre Production III present an amplification of Theatre Production I rather than a sequential advancement in instruction. In all three courses, students are involved in every aspect of theatre production, and the intermediate and advanced levels outlined in THE 112 and THE 113, respectively, represent an increasingly sophisticated level of the

students' involvement in those aspects of theatre production.

## TRUCK DRIVER TRAINING

### TDT 100 | BASIC OPERATION (2) One lecture; two lab

*Prerequisite: Admission to program.*  
Covers basic operation of control systems, shifting and transmissions, basic vehicle control, coupling and uncoupling.

### TDT 110 | SAFE AND ADVANCED OPERATING PRACTICES (2) One lecture; two lab

*Prerequisite: Admission to program.*  
Covers special rigs, visual search, communications, speed and space management, night and extreme driving conditions, hazards, emergency maneuvers, skid control and recovery.

### TDT 120 | VEHICLE MAINTENANCE (1) One lecture

*Prerequisite: Admission to program.*  
Covers an understanding of vehicle systems, general and advanced preventive maintenance, diagnosis and reporting of malfunctions, managing/handling cargo distribution and cargo documentation.

### TDT 130 | NON-VEHICLE ACTIVITIES (2)

**Two lecture**  
*Prerequisite: Admission to program.*  
Covers managing/handling cargo, distribution and cargo documentation. Learning the importance of personal health, hygiene and safety. It will also cover customer and employer relations along with career planning to ensure their success in the transportation industry.

### TDT 140 | PREPARATION FOR CDL WRITTEN EXAM (1) One lecture

*Prerequisite: Admission to program.*  
Covers Arizona Commercial Drivers License requirements for combination vehicles, Hazmat, double or triples, and tank endorsements.

### TDT 150 | SPECIALIZED TRAINING (1) Course Fee: \$300 | One lecture

Designed to review skills for those who

have previously held a Commercial Driver's License and are renewing it, or for those with a current CDL who would want practice. It is not open to the general public.

## TRANSITIONAL STUDIES

### TRE 089 | TRANSITIONAL ENGLISH (3) Three lecture | *Prerequisite: Appropriate score on Compass test.*

An intensive review of the fundamentals of written and oral communication. Written communication review will include grammar, word usage, punctuation, and sentence, paragraph and essay structure culminating in a short research paper. Oral communications review will focus on presentation skills.

### TRM 090 | PRE-ALGEBRA (3) Three lecture | *Prerequisite: Appropriate score on assessment test.*

Bridging basic arithmetic and beginning algebra, this course integrates a review of arithmetic, negative numbers, fractions, ratio, proportion, percentage, simple geometry, unit analysis, and solving basic equations.

### TRM 091 | BEGINNING ALGEBRA (3) Three lecture | *Prerequisite: Successful completion of TRM 090 or appropriate score on assessment test.*

A beginning course in algebra including, linear equations and inequalities, basic graphing, systems of linear equations, polynomials, factoring, simple rational expressions and equations, integer exponents and simple radicals.

## WELDING TECHNOLOGY

### WLD 102 | CUTTING PROCESS AND WELDING QUALITY (3) Course Fee: \$108 | One lecture; three lab. *Corequisite: BTR 105*

Introduces oxy-fuel cutting (OFC), plasma arc cutting (PAC) and carbon arc cutting (CAC)

### WLD 105 | WELD FIT UP/ INSPECTION/METALLURGY(2) Course Fee: \$93 | Two lecture

Introduction to visual inspection, joint fit-up, welding symbols and metallurgy.

### WLD 114 | MATH FOR WELDERS (3) Three lecture *Prerequisite: Appropriate score on assessment test or successful completion of TRM 090.* Use basic mathematics skills in practical exercises useful in the welding field.

### WLD 125A | SHIELDED METAL ARC WELDING, PLATE I (3) Course Fee: \$108 | One lecture; three lab *Corequisite: BTR 105* Introduces SMAW welding and equipment; arc welding stringer beads on fillets in all positions.

### WLD 125B | SHIELDED METAL ARC WELDING, PLATE II (3) Course Fee: \$108 | One lecture; three lab *Prerequisite: Successful completion of WLD 125A* Introduces SMAW welding of quality V-groove welds with backing strap in all positions.

### WLD 126 | GAS TUNGSTEN ARC WELDING I, PLATE I (3) Course Fee: \$108 | One lecture; three lab *Corequisite: BTR 105* Introduces equipment setup and plate welding in the 1G & 2G positions, open root.

### WLD 129 | GAS METAL ARC WELDING (3) Course Fee: \$170 | One lecture; three lab. *Corequisite: BTR 105* A comprehensive study and application of Gas Metal Arc Welding & also emphasizes the safety practices and procedures used in the welding industry, as well as appropriate workplace skills also includes welding symbols, joint design, & control of distortion.

### WLD 156 | AWS Level 1 (Entry Level Welder) Certification Preparation (2) One lecture; two lab. *Prerequisite: Completion of any Welding Certificate plus completion of Entry Level I Welder Certificate or permission of instructor.* Prepares student for the nine part AWS national certification exam.

### WLD 157 | AWS LEVEL 1 CERTIFICATION (ENTRY LEVEL WELDER) PREPARATION AND

## Course Descriptions

### **WORKMANSHIP QUALIFICATION (4)**

**One lecture; six lab.**

*Prerequisite:* WLD 156 or permission of instructor.

In Accordance with AWS SENSE

QC10:2008, student will prepare test pieces and perform qualification testing to drawings AWS EDU -1 through AWS EDU – 6, Welder Performance Qualification Tests.

### **WLD 201 | FLUX CORED ARC WELDING (3)**

**Course Fee: \$170 | One lecture; three lab**

*Prerequisite:* Successful completion of WLD 129.

A comprehensive study and application of Flux Cored Arc Welding – Gas Shielded & Flux Cored Arc Welding – Self Shielded also emphasizes the safety practices and procedures used in the welding industry, as well as appropriate workplace skills.

### **WLD 226 | GAS TUNGSTEN ARC WELDING, PLATE II (3)**

**Course Fee: \$108 | One lecture; three lab**

*Prerequisite:* Successful completion of WLD 126.

Advance plate welding in the 3G and 4G positions, open root.

### **WLD 228 | GAS TUNGSTEN ARC WELDING PIPE I (3)**

**Course Fee: \$108 | One lecture; three lab**

*Prerequisite:* Successful completion of WLD 126 and WLD 226

A comprehensive coverage of the Gas Tungsten Arc Welding process. Covers techniques in tube and pipe welding using carbon steel and alloy steel base metals.

### **WLD 229 | GAS METAL ARC WELDING PIPE (3)**

**Course Fee: \$108 | One lecture; three lab**

*Prerequisite:* Successful completion of WLD 129.

Introduces gas metal arc welding of open V-groove pipe welds.

### **WLD 231 | WELDING PRINT READING (3)**

**Three lecture**

*Prerequisite:* Appropriate score on assessment test or successful completion of PCS 021 and TRM 090.

Concentrates on print reading as it relates to the welding profession with a strong focus on welding symbols.

### **WLD 261 | SMAW OPEN V-BUTTS/ PLATE I (3) (COMING FALL 2012)**

**One lecture; three lab**

*Prerequisite:* Successful completion of WLD 125A and WLD 125B

Introduction to the open V-butt in the 1G and 2G positions.

### **WLD 262 | SMAW OPEN V-BUTTS/ PLATE II (3) (COMING FALL 2012)**

**One lecture; three lab**

*Prerequisite:* Successful completion of WLD 261

Advanced instruction in open V-butt welds used in the 3G and 4G positions.

### **WLD 263 | SMAW OPEN ROOT/PIPE I (3) (COMING FALL 2012)**

**One lecture; three lab**

*Prerequisite:* Successful completion of WLD 261 and 262

Open root pipe welds in the 1G and 2G positions using SMAW equipment.

### **WLD 264 | SMAW ROOT/PIPE II (3) (COMING FALL 2012)**

**One lecture; three lab**

*Prerequisite:* Successful completion of WLD 263

Advanced instruction in open root pipe welds in the 5G and 6G positions using SMAW equipment.

## **WOMEN'S STUDIES**

### **WST 101 | INTRODUCTION TO WOMEN'S STUDIES (3)**

**Transferable Course | three lecture**

*Prerequisites:* Appropriate score on assessment test or successful completion of PCS 021 and TRE 089.

An interdisciplinary study to introduce the ways in which gender interacts with race, age, class and sexuality. In addition, the course examines in a theoretical framework women's issues: health, roles, religion, law and policy, communication, parenting, employment and global awareness.

## Administration

### President

Michael J. Kearns (2004)  
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Cleveland State University, MBA  
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### Vice President

H. Lynn Cundiff (2007)  
Southern Illinois University, Ph.D.  
Northeast Missouri State University, MA  
William Jewell College, BA

### Associate Vice President for College Advancement

Alan Klaas (2008)  
Southern Illinois University, Ph.D., MS

### Associate Vice President for Information Technology

Francisco Porras (2009)

### Interim Dean of Instruction

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University of Arizona, Ph.D., MS  
University of California, Irvine, BS  
University of Nebraska, BS

### Dean of Student Services

Jann Woods (2001)  
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### Interim Dean of Business

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Parsons College, BA

### Bullhead City Campus Dean

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### Distance Education Campus Dean

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Athena Cawley (1996)  
Cassandra Cawley (2008)  
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Julie Curwick (2005)  
Tracee Dartsch-Tomkins (2003)  
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Tommy Diehl (1997)  
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Megan Dyson (2010)  
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Ruben Espinoza (2008)  
Jack Feese (2010)  
Tal Ferguson (2004)  
Roy Figueroa (2007)  
Charlene Filipiak (2004)  
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Donald Frerichs (2007)  
Roman Fuentes (2010)  
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Tiffany Gray (2006)  
Carri Grigsby (2010)  
Gerry Gyurkovitz (2010)  
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Evelyn Laforett (2011)  
Lennette Lopez (2007)  
Shelley Lossing (1992)  
Christine Loy (2010)  
Sergio Madero (2006)  
Sonni Marbury (2010)  
Barbara Matejka (1990)  
Michael Maurer (2010)  
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Kimberly McDade (2002)  
Allen McIlvain (2006)  
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Jody Millward (2009)  
Teresa Monda (2007)  
Sharon Moon (2008)  
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Jason Mullavey (2010)  
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Freddie Orange (2010)  
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Maureen Reid (2005)  
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Rebecca Riddle (2010)  
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Marlene Rislund (2005)  
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Cassi Strain (2010)  
Cathleen Stubblefield (2004)  
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Ernie Suchy (2001)  
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Elizabeth Tamayo (2007)  
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Darin Transue (2005)  
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Corrie Valencia (2005)  
Christine Van Vleet (2010)  
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 Starr, Neil (2005)  
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 Stewart, Thomas (2010)  
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 Strauch, Michael (2008)  
 Stricklin, Brian (2009)  
 Strom, Andrew (2010)  
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 Szpilka, Marianne (2008)  
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 Ternes, Emily (2008)  
 Terrell, Gary (2007)  
 Terry, David (2007)  
 Terry, Eric (2010)  
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 Torres, Linda (2009)  
 Tortora, Matthew (2011)  
 Tracey, Toni (2009)  
 Treichel, Robert (2009)  
 Ulbert, Tera (2009)  
 Unangst, Robert (2007)  
 Valles, Gloria (2006)  
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 Walker, Friend (2008)  
 Walker, James (2011)  
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Wright, Eric (2007)  
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Wyneken, Tara (2010)  
Yager, Kathy (1995)  
Yee, Robert (2005)  
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