2011-2012 CATALOG and HANDBOOK ADDENDUM

Prepared by the
Instructional Support Services Office
July 28, 2011

phoenixcollege.edu

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Success Begins Here.

In efforts to provide current information for Phoenix College’s programs, the Instructional Support Services Office has prepared this addendum to provide students, faculty, and staff with the occupational and academic programs that were not available at the time of printing for the 2011-2012 Catalog and Handbook.

The Phoenix College faculty and student affairs services are here to assist you. See pages 8 through 19 of the 2011-2012 Catalog and Handbook for available services, or visit with your faculty members during their scheduled office hours.

Please contact the Instructional Support Services Office if you have any questions about this document.

Respectfully,

Casandra Kakar,
Vice President, Academic Affairs

For additional information on PC program competencies, visit:
http://www.maricopa.edu/academic/ccta/curric/progpc.php

For additional information on MCCCDD course competencies, visit:
http://www.maricopa.edu/academic/ccta/curric/search_course.php

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Revised: 9/2/2011; 10/28/11; 12/7/11
Phoenix College Programs & Awards
The following programs and awards are listed alphabetically by title within
instructional/occupational areas.

Key: AAS [♦] CCL [*] AC [**] Transfer [●] Shared [∎]

### Instructional/Occupational Programs:

#### AREA

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<td>Culinary Studies [♦ ♦]</td>
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Revised: 9/2/2011; 10/28/11; 12/7/11
ART, A/V TECHNOLOGY, AND COMMUNICATION

Department Chairperson: Ms. D. Doubleday
Program Director: Dr. K. Schindler
Contact: (602) 285-7876 and/or marsha.taylor@pcmail.maricopa.edu

Audio Production Technologies — Modified Occupational Program
Associate in Applied Science — AAS 3024
64-69 Credits
The Associate in Applied Science (AAS) in Audio Production Technologies program offers students an opportunity to receive training on industry-standard equipment by instructors with real-world experience and professional resumes. Students learn the concepts and theory associated with recording arts technologies while applying them in lab settings appropriate to their skill levels. Students completing the degree in Audio Production Technologies will gain the knowledge base, competency, and confidence they need to enter the commercial music marketplace.

Program Notes:
Students must earn a grade of "C" or better in all courses required within the program.
+ indicates course has prerequisite and/or corequisites.

Admission Criteria: None

Program Prerequisites: None

Required Courses: 39-41 Credits

MTC191 Electronic Music I 3
+ MTC192 Electronic Music II 3
MUC109 Music Business: Merchandising and the Law 3
MUC110 Music Business: Recording and Mass Media 3
+ MUC111 Digital Audio Workstation I (DAW I) 3
+ MUC112 Digital Audio Workstation II (DAW II) 3
MUC195 Studio Music Recording I (3) OR
MUC195AA Studio Music Recording I (3) 3
+ MUC196 Studio Music Recording II 3
+ MUC297AA Music Internship 1

Select one of the following two (2) tracks

Track I - Audio Production: 14 Credits

MTC101 Introduction to Music Theory 3
MTC103 Introduction to Aural Perception 2
MUC197 Live Sound Reinforcement I 3
+ MUC198 Live Sound Reinforcement II 3
MTC180 Computer Literacy for Musicians (3) OR
+ MUC295 Studio Music Recording III (3) 3

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Revised: 9/2/2011; 10/28/11; 12/7/11
Track II - Sound Design: 16 Credits
+ MTC105  Music Theory I  3
+ MTC106  Aural Perception I  1
+ MUC122  Sound Design I (3) OR
  MTC/TCM120  Introduction to Sound Design for Film and Video (3)  3
+ MUC222  Sound Design II (3) OR
+ MTC/TCM220  Advanced Sound Design for Film and Video  3
+ MUC194  Introduction to Audio Mixing Techniques  3
+ MUC292  Sound Design III  3

General Education Requirements: 25-28 Credits

General Education Core: 12-15 Credits
First-Year Composition: 6 Credits
+ Any approved general education courses from the First-Year Composition area.  6

Oral Communication: 3 Credits
+ Any approved general education course from the Oral Communication area.  3

Critical Reading: 0-3 Credits
+ CRE101  College Critical Reading (3) OR
  Equivalent as indicated by assessment.  0-3

Mathematics: 3 Credits
+ Any approved general education course from the Mathematics area.  3

General Education Distribution: 13 Credits
Humanities and Fine Arts: 6 Credits
+ Any approved general education course from the Humanities and Fine Arts area.
  MHL140 or MHL145 or MHL153 recommended.  6

Social and Behavioral Sciences: 3 Credits
+ Any approved general education course from the Social and Behavioral Sciences area.  3

Natural Sciences: 4 Credits
+ Any approved general education course from the Natural Sciences area.  4

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Revised: 9/2/2011; 10/28/11; 12/7/11
BUSINESS, MANAGEMENT, AND ADMINISTRATION

Department Chairperson: Ms. C. Cloud
Contact: (602) 285-7387 and/or http://www.phoenixcollege.edu/business

Small Business Start-Up – Modified Occupational Program
Certificate of Completion – CCL 5706 $85
12 Credits
The Certificate of Completion (CCL) in Small Business Start-Up program is designed to meet the needs of individuals who wish to become entrepreneurs. It is a flexible program that consists of 1, 2, and 3 credit courses that can be offered in a variety of formats (online, on ground, flex express, accelerated) to support the schedules of prospective small business owners. Courses provide a background in marketing, management, finance, and a capstone course in which students complete a business plan. The goal of the Small Business Start-Up certificate is to create a foundation for prospective small business owners and contribute to the long-term success of the business community.

Program Notes: None

Admission Criteria: None

Program Prerequisites: None

Required Courses: 12 Credits
- MGT253 Owning and Operating a Small Business 3
- MKT271 Principles of Marketing 3
- SBS213 Hiring and Management Employees 1
- SBS214 Small Business Customer Relations 1
- SBS220 Internet Marketing for Small Business 2
- SBS230 Financial and Tax Management for Small Business 2

Organizational Management – Modified Occupational Program
Associate in Applied Science – AAS 3727 $110
60 Credits
The Associate in Applied Science (AAS) in Organizational Management program provides students with a customized curriculum specific to the student's individual needs in addition to the knowledge and skills needed in today's changing workplace. The program develops leadership and communication skills and techniques for planning, directing, and evaluating business situations, with an emphasis on effective allocation of time, money, materials, space, and personnel. The curriculum combines coursework in leadership with a general education component.

Program Notes: Students must earn a grade of "C" or better for all courses required within the program.
+ indicates course has prerequisites and/or corequisites.

Admission Criteria: None

Program Prerequisites: None

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Required Courses: 18 Credits
Certificate of Completion in Organizational Leadership (5731) 18

Restricted Electives: 19-25 Credits
Students must choose 19-25 industry/job related course credits from any MCCCD occupational program and/or Academic Certificate.

Industry/job related course credits must include a minimum of 9 credits with a common subject or theme. Program of study must be approved by the business department chair or designee.

General Education Requirements: 22-27 Credits

General Education Core: 12-17 Credits
First-Year Composition: 6 Credits
+ ENG101 First-Year Composition (3) OR
+ ENG107 First-Year Composition for ESL (3) AND
+ ENG102 First-Year Composition (3) OR
+ ENG108 First-Year Composition for ESL (3) 6

Oral Communication: 3 Credits
Any approved General Education course from the Oral Communication area. 3

Critical Reading: 0-3 Credits
+ CRE101 College Critical Reading (3) OR
Equivalent by assessment. 0-3

Mathematics: 3-5 Credits
Any approved General Education course from the Mathematics area. 3-5

General Education Distribution: 10 Credits
Humanities and Fine Arts: 3 Credits
Any approved General Education course in the Humanities and Fine Arts area. 3

Social and Behavioral Sciences: 3 Credits
Any approved General Education course in the Social and Behavioral Sciences area. 3

Natural Sciences: 4 Credits
Any approved General Education course in the Natural Sciences area. 4

Department Chairperson: Ms. C. Cloud
Contact: (602) 285-7387 and/or http://www.phoenixcollege.edu/business

Organizational Leadership – Modified Occupational Program
Certificate of Completion – CCL 5731 18
18 Credits
The Certificate of Completion (CCL) in Organizational Leadership provides students with knowledge and skills needed in today's changing workplace. The program develops leadership and communication skills and techniques for planning, directing, and evaluating business situations. This program also emphasizes procedures for effective allocation of time, money, materials, space, and personnel.

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Revised: 9/2/2011; 10/28/11; 12/7/11
Program Notes: + indicates course has prerequisites and/or corequisites. Students must earn a grade of "C" or better for all courses within the program.

Admission Criteria: None

Program Prerequisites: None

Required Courses: 18 Credits

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>Computer Usage and Applications (3) OR</td>
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<td>CIS105</td>
<td>Survey of Computer Information Systems (3)</td>
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<td>GBS110</td>
<td>Human Relations in Business and Industry (3) OR</td>
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<td>MGT251</td>
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<td>+ GBS233</td>
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<td>MGT175</td>
<td>Business Organization and Management (3) OR</td>
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<td>TQM240</td>
<td>Project Management in Quality Organizations (3)</td>
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<tr>
<td>MGT101</td>
<td>Techniques of Supervision (3) OR</td>
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<tr>
<td>MGT229</td>
<td>Management and Leadership I (3)</td>
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HEALTH SCIENCE

Department Chairperson: Ms. L. Parmelee
Program Director: Ms. T. Domino
Contact: (602) 285-7295 and/or marty.minton@pcmail.maricopa.edu

Health Information Technology — Modified Occupational Program

Associate in Applied Science – AAS 3324
68-71 Credits
The Associate in Applied Science (AAS) in Health Information Technology program is designed to meet the increasing demands for professionally trained Health Information Technicians in health-care agencies such as clinics, hospitals, long-term care facilities, home health agencies, state health departments, and other organizations that compile or use health information such as large insurance agencies, medical research centers, and law firms.

The program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (233 N. Michigan Avenue, Suite 2150, Chicago, IL, 60601-5800). Graduates are eligible to apply to take the examination of the American Health Information Management Association for the designation RHIT - Registered Health Information Technician.

Program Notes:
Students must earn a grade of "C" or better in all courses required within the program.
+ indicates course has prerequisites and/or corequisites.
Credit will not be awarded for both a course and its modular equivalent.
Students in this program participate in mandatory professional placements in health care settings. Prior to practice placements students must provide documented proof of meeting current requirements for: CPR training, health and drug screenings, and immunizations.
To obtain an application, contact the Program Director or the Health Professions Advisor.

Admission Criteria:
A high school diploma or GED equivalent.
Formal application and admission to the program is required.

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Revised: 9/2/2011; 10/28/11; 12/7/11
Program Prerequisites: 7-13 Credits
The credit hour range is subject to change depending on the student's educational experiences. Students must select Option 1 or Option 2.

Option 1: 7 Credits
Option 1 is available for students who have completed an Associate in Applied Science degree or higher degree in a health science discipline from a regionally accredited institution of higher education recognized by Maricopa County Community College District.

+ BIO156 Introductory Biology for Allied Health (4) (recommended) OR
+ BIO181 General Biology (Majors) I (4)
+ ENG101 First Year Composition (3) OR
+ ENG107 First-Year Composition for ESL (3)

Option 2: 13 Credits
Option 2 is available for students who do not have an Associate in Applied Science degree or higher degree in a health science discipline.

+ BIO156 Introductory Biology for Allied Health (4) (recommended) OR
+ BIO181 General Biology (Majors) I (4)
+ ENG101 First Year Composition (3) OR
+ ENG107 First-Year Composition for ESL (3)
+ HCC130 Fundamentals in Health Care Delivery
+ HCC145 Medical Terminology for Health Care Workers

Required Courses: 53 Credits
+ BIO201 Human Anatomy and Physiology I
+ BIO202 Human Anatomy and Physiology II
+ BPC110 Computer Usage and Applications
+ EMT/HCC/RES109 CPR for Health Care Provider (0.5) OR
  Current CPR certification at the health care provider OR
  Professional rescuer level. 0.5
+ HCC164 Pharmacology for Allied Health 0.5
+ HCC204 Clinical Pathophysiology 3
+ HCC208 Health Care Leadership 1
+ HIM101 Introduction to Health Information Management 1
+ HIM106 Legal Aspects of Health Information Management (3) OR
+ HIM106AA Legal Aspects of Health Information Management I (1.5) AND
+ HIM106AB Legal Aspects of Health Information Management II (1.5)
+ HIM140 Acute Care Documentation and Standards 2
+ HIM150 Health Care Data 2
+ HIM180 Introduction to Medical Billing and Reimbursement 2
+ HIM201 Health Information Statistics and Research 2
+ HIM206 Health Information Management in Alternative Care Settings (2) OR
+ HIM206AA Health Information Management in Alternative Care Settings: Long Term (1) AND
+ HIM206AB Health Information Management in Alternative Care Settings: Other (1)
+ HIM207 Health Information Organizational Resource Management 2
+ HIM209 ICD Coding 4
+ HIM211 Advanced Applications of Coding and Reimbursement 4
+ HIM212 CPT Coding I 2
+ HIM214 CPT Coding II 2
+ HIM217 Health Information Management Seminar I 1
+ HIM218 Professional Practice 1
+ HIM219 Health Information Management Systems 3
+ HIM220 Health Information Management Seminar II 1
+ HIM224 Advanced Professional Practice 1
+ HIM230 Quality Management and Performance Improvement 2

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General Education Requirements: 15-18 Credits

General Education Core: 9-12 Credits

First-Year Composition: 3 Credits
   Met by ENG101 or ENG107, in Program Prerequisites area.
   + ENG102   First-Year Composition (3) OR
   + ENG108   First-Year Composition for ESL (3) OR
   + ENG111   Technical Writing (3)

Oral Communication: 3 Credits
   COM110   Interpersonal Communication

Critical Reading: 0-3 Credits
   + CRE101   College Critical Reading (3) OR
   + CRE111   Critical Reading for Business and Industry (3) OR
              Equivalent as indicated by assessment.

Mathematics: 3 Credits
   + MAT102   Mathematical Concepts/Applications

General Education Distribution: 6 Credits

Humanities and Fine Arts: 3 Credits
   Any approved General Education course in the Humanities and Fine Arts area.

Social and Behavioral Sciences: 3 Credits
   Any approved General Education course in the Social and Behavioral Sciences area.

Natural Sciences: 0 Credits
   Met by BIO156 or BIO181 in Program Prerequisites area.

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Department Chairperson: Ms. L. Parmelee
Program Director: Ms. T. Domino
Contact: (602) 285-7295 and/or
marty.minton@pcmail.maricopa.edu

Health Information: Long Term Care Settings — Modified Occupational Program
Certificate of Completion — CCL 5324
19 Credits
The Certificate of Completion (CCL) in Health Information: Long Term Care Settings program prepares individuals for entry-level health information processing positions in long term, home health, and hospice facilities. Students will perform such duties as collecting, analyzing, assembling, releasing, coding, and reporting patient information in both paper and electronic record systems.

Program Notes:
Students must earn a grade of "C" or better in all courses required within the program.
+ indicates course has prerequisites and/or corequisites.

Admission Criteria:
Current English assessment reflecting eligibility for ENG101 First-Year Composition OR ENG107 First-Year Composition for ESL OR Permission of program director AND High school diploma, OR GED OR Equivalent.

Program Prerequisites: 0-5 Credits
College level reading skills are strongly recommended.

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<th>Description</th>
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<td>HCC130</td>
<td>Fundamentals in Health Care Delivery (3) OR</td>
<td>0-3</td>
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<td>Permission of Program Director</td>
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<tr>
<td>HIM140</td>
<td>Acute Care Documentation and Standards (2) OR</td>
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Required Courses: 19 Credits

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<th>Description</th>
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<tr>
<td>+ BIO160</td>
<td>Introduction to Human Anatomy and Physiology</td>
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<tr>
<td>BPC110</td>
<td>Computer Usage and Applications</td>
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</tr>
<tr>
<td>HCC146</td>
<td>Common Medical Terminology for Health Care Workers</td>
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<tr>
<td>+ HIM101</td>
<td>Introduction to Health Information Management</td>
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<tr>
<td>+ HIM106</td>
<td>Legal Aspects of Health Information Management (3) OR</td>
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<td>+ HIM106AA</td>
<td>Legal Aspects of Health Information Management I (1.5) AND</td>
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<tr>
<td>+ HIM106AB</td>
<td>Legal Aspects of Health Information Management II (1.5)</td>
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<tr>
<td>+ HIM182</td>
<td>Human Diseases for Coding in Long Term Care Settings</td>
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<td>+ HIM183</td>
<td>Diagnostic Coding in Long Term Care Settings</td>
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<tr>
<td>+ HIM205</td>
<td>Health Information Management Systems in Long Term Care Settings</td>
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<tr>
<td>+ HIM206AA</td>
<td>Health Information Management in Alternative Care Settings: Long Term</td>
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</tbody>
</table>
Laboratory Assisting — Modified Occupational Program

Certificate of Completion — CCL 5134

5 Credits

The Certificate of Completion (CCL) in Laboratory Assisting program provides education and training for employment in various laboratories. Laboratory Assistants perform pre-analytical processes, point-of-care testing, and initiate testing to provide clinical support for testing and reporting of laboratory tests. Professional duties throughout various areas in a laboratory include specimen processing, inventory management, conducting quality control and quality assurance activities, performing point-of-care testing, selecting laboratory tests, initiating testing on automated analyzers, and using computers to assist in testing and documenting laboratory activities. Students in the Laboratory Assisting Program will be in contact with potentially infectious blood, tissues, and body fluids.

Program Notes:
+ indicates course has prerequisites and/or corequisites.
Students must earn a grade of “C” or better for all courses required within the program.

Admission Criteria:
High school diploma or GED.
Completion of Program Prerequisites.
Ability to fully participate in classroom, laboratory, or clinical setting program activities.
Proof of current immunization: MMR (Measles, Mumps, and Rubella), TB (tuberculosis skin test), varicella, tetanus, diphtheria, and HEB (Hepatitis B vaccine).
Submit current CPR card for Health Care Provider and maintain current status throughout the practicum(s).
Complete and submit health declaration form signed by a licensed health care provider.
Submit to a drug screening and demonstrate negative results.

Program Prerequisites: 2.5-6.5 Credits
The credit hour range is subject to change depending on the student's educational experiences.

Option 1: 6.5 Credits

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<td>Fundamentals in Health Care Delivery</td>
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</tr>
<tr>
<td>HCC145AA</td>
<td>Medical Terminology for Health Care Workers I</td>
<td>1</td>
</tr>
<tr>
<td>+ PLB109</td>
<td>Basic Phlebotomy Skills</td>
<td>1</td>
</tr>
<tr>
<td>+ PLB110</td>
<td>Practicum: Fundamental Phlebotomy Skills</td>
<td>0.5</td>
</tr>
<tr>
<td>+ PLB111</td>
<td>Specimen Processing and Advanced Techniques in Phlebotomy Procedures</td>
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</table>

Option 2: 2.5 Credits

HCC130 (3.0) and HCC145AA (1.0) are waived for students who have completed an Associate of Applied Science degree or higher degree in a health science discipline from a regionally accredited institution of higher education recognized by the Maricopa Community College District.

Option 3: 0 Credits

HCC130, HCC145AA, PLB109, PLB110, and PLB111 may be waived by the Program Director for the Student who has one or more years as a health care professional with documented phlebotomy experience.

Required Courses: 5 Credits

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>+ LBA150</td>
<td>Overview of Laboratory Assisting</td>
<td>1</td>
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<tr>
<td>+ LBA152</td>
<td>Laboratory Assisting: Principles and Procedures</td>
<td>2</td>
</tr>
<tr>
<td>+ LBA158</td>
<td>Laboratory Assisting Practicum</td>
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Department Chairperson: Ms. L. Parmelee  
Program Director: Ms. S. Ketcham  
Contact: (602) 285-7295 and/or  
marty.minton@pcmail.maricopa.edu

Medical Assisting—Modified Occupational Program  
Associate in Applied Science – AAS 3291  
60 Credits
The Associate in Applied Science (AAS) Medical Assisting program provides education and training for employment in physicians' offices and group medical practices, and other healthcare settings. Medical Assistants perform administrative and clinical duties. Duties may include management and maintenance of the office and treatment areas. Administrative duties include receiving patients and their family members, acting as an informational and educational resource for the patient, handling telephone and written communications, managing patient records, bookkeeping, filing, insurance processing, typing, appointment scheduling, and managing public relations. Clinical duties include preparing the patient for treatment, preparing and sterilizing instruments, maintaining a supply inventory, obtaining specimens for diagnostic evaluation, performing EKGs, and administering medications under the direction of the physician/clinician. Students in the Medical Assisting program will be in contact with potentially infectious blood, tissues, and body fluids. A Certificate of Completion (CCL) is also available.

Program Notes:
+ indicates course has prerequisites and/or corequisites.
Students must earn a grade of "C" or better for all courses required within the program.
Credit will not be awarded for both a course and its modular equivalency.

Admission Criteria:
Formal application and admission to the program is required.
Must be a high school graduate or equivalent.
Completion of Program Prerequisites.
Have the ability to fully participate in classroom, laboratory, and clinical setting program activities.
Submit current CPR card for Health Care Provider (American Heart Association approved) and maintain current status throughout the externship(s).
Complete and submit the required proof of immunity and health declaration form signed by a licensed health care provider.
Submit current fingerprinting clearance card.

Program Prerequisites: 0-3 Credits  
HCC145 Medical Terminology for Health Care Workers (3) OR  
Permission of Program Director.  

Required Courses: 27-30 Credits
The credit hour range is subject to change, depending on the student's educational experience.

Option 1: 27 Credits  
HCC130 (3.0) is waived for students who have completed an Associate in Applied Science degree or higher degree in a health science discipline from a regionally accredited institution of higher education recognized by the Maricopa Community Colleges.
+
+ MAS126 Administrative Procedures 3  
+ MAS127 Insurance, Billing and Coding 3  
+ MAS128 Electronic Health Records for Medical Assisting 2  
+ MAS129 Automated Computer System for Medical Office Management 2  
+ MAS130 Orientation to the Pathophysiology and Psychology of Body Systems 1  
+ MAS210 Aseptic Techniques 1  
+ MAS220 Laboratory Testing in Patient Care Service Centers 1  
+ MAS230 Emergencies in the Medical Office 1.5  
+ MAS240 Applied EKG 1

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
+ MAS260  Clinical Procedures  3
+ MAS265  Administration of Medication  3
+ MAS274  Administrative Medical Assisting Externship  1
+ MAS275  Clinical Medical Assisting Externship  2
+ MAS280  Medical Assisting Program Review  1
+ PLB109  Phlebotomy: Basic Skills  1
+ PLB110  Practicum: Fundamental Phlebotomy Skills  0.5

Option 2: 30 Credits
- HCC130  Fundamentals in Health Care Delivery  3
+ MAS126  Administrative Procedures  3
+ MAS127  Insurance, Billing and Coding  3
+ MAS128  Electronic Health Records for Medical Assisting  2
+ MAS129  Automated Computer System for Medical Office Management  2
+ MAS130  Orientation to the Pathophysiology and Psychology of Body Systems  1
+ MAS210  Aseptic Techniques  1
+ MAS220  Laboratory Testing in Patient Care Service Centers  1
+ MAS230  Emergencies in the Medical Office  1.5
+ MAS240  Applied EKG  1
+ MAS260  Clinical Procedures  3
+ MAS265  Administration of Medication  3
+ MAS274  Administrative Medical Assisting Externship  1
+ MAS275  Clinical Medical Assisting Externship  2
+ MAS280  Medical Assisting Program Review  1
+ PLB109  Phlebotomy: Basic Skills  1
+ PLB110  Practicum: Fundamental Phlebotomy Skills  0.5

Restricted Electives: 8-14 Credits
Courses to be selected in consultation with Program Director.

Students meeting OPTION 1 in Required Courses must complete a total of 14 credits in the Restricted Electives area.

Students meeting OPTION 2 in Required Courses must complete 8 credits in the Restricted Electives area.

+ COM225  Public Speaking  3
+ COM230  Small Group Communication  3
+ COM259  Communication in Business and Professions  3
+ COM263  Elements of Intercultural Communication  3
+ FON100  Introductory Nutrition  3
+ HES100  Healthful Living  3
+ HES126  Women's Health Issues  3
+ MGT229  Management and Leadership I  3
+ MGT251  Human Relations in Business  3
+ PED115  Lifetime Fitness  2
+ PSY218  Health Psychology  3
+ SLG101  American Sign Language I  4
+ SPA101  Elementary Spanish I  4
+ SPA115  Beginning Spanish Conversation I  3
+ SPA117AA  Health Care Spanish I: Introduction  1
+ SPA117AB  Health Care Spanish I: Intermediate  1
+ WED100  Personal Wellness  2
+ WED151  Overview of Alternative Medicine  3
+ WED162  Meditation and Wellness  1
+ WED170  Principles of Homeopathy  1

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
General Education Requirements: 22-25 Credits

General Education Core: 12-15 Credits
First-Year Composition: 6 Credits
  + Any approved General Education courses in the First-Year Composition area. 6
Oral Communication: 3 Credits
  COM110 Interpersonal Communication 3
Critical Reading: 0-3 Credits
  + Any approved General Education course in the Critical Reading area (3) OR Equivalent as indicated by assessment. 0-3
Mathematics: 3 Credits
  + Any approved General Education course in the Mathematics area OR Satisfactory completion of a higher level mathematics course 3

General Education Distribution: 10 Credits
Humanities and Fine Arts: 3 Credits
  Any approved General Education course in the Humanities and Fine Arts area. 3
Social and Behavioral Sciences: 3 Credits
  PSY101 Introduction to Psychology 3
Natural Sciences: 4 Credits
  BIO160 Introduction to Human Anatomy and Physiology 4

Department Chairperson: Ms. L. Parmelee
Program Director: Ms. S. Ketcham
Contact: (602) 285-7295 and/or marty.minton@pcmail.maricopa.edu

Medical Assisting — Modified Occupational Program
Certificate of Completion – CCL 5291
27-30 Credits
The Certificate of Completion (CCL) in Medical Assisting program provides education and training for employment in physician's offices and group medical practices, and other healthcare settings. Medical Assistants perform administrative and clinical duties. Duties may include management and maintenance of the office and treatment areas. Administrative duties include receiving patients and their family members, acting as an informational and educational resource for the patient, handling telephone and written communications, managing patient records, bookkeeping, filing, insurance processing, typing, appointment scheduling, and managing public relations. Clinical duties include preparing the patient for treatment, preparing and sterilizing instruments, maintaining a supply inventory, obtaining specimens for diagnostic evaluation, performing EKG's, and administering medications under the direction of the physician/clinician. Students in the Medical Assisting program will be in contact with potentially infectious blood, tissues, and body fluids. An Associate in Applied Science (AAS) is also available.

Program Notes:
+ indicates course has prerequisites and/or corequisites.
Students must earn a grade of "C" or better for all courses required within the program.

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.
Revised: 9/2/2011; 10/28/11; 12/7/11
Admission Criteria:
Formal application and admission to the program is required.
Completion of Program Prerequisites.
Must be a high school graduate or equivalent.
Have the ability to fully participate in classroom, laboratory, and clinical setting program activities.
Submit current CPR card for Health Care Provider (American Heart Association approved) and maintain current status throughout the externship(s).
Complete and submit the required proof of immunity and health declaration form signed by a licensed health care provider.
Submit current fingerprinting clearance card.

Program Prerequisites: 0-3 Credits
HCC145 Medical Terminology for Health Care Workers (3) OR Permission of Program Director. 0-3

Required Courses: 27-30 Credits
The credit hour range is subject to change, depending on the student's educational experience.
Students must select Option 1 or Option 2.

Option 1: 27 Credits
HCC130 (3.0) is waived for students who have completed an Associate in Applied Science degree or higher degree in a health science discipline from a regionally accredited institution of higher education recognized by the Maricopa Community Colleges.

+ MAS126 Administrative Procedures 3
+ MAS127 Insurance, Billing and Coding 3
+ MAS128 Electronic Health Records for Medical Assisting 2
+ MAS129 Automated Computer System for Medical Office Management 2
+ MAS130 Orientation to the Pathophysiology and Psychology of Body Systems 1
+ MAS210 Aseptic Techniques 1
+ MAS220 Laboratory Testing in Patient Care Service Centers 1
+ MAS230 Emergencies in the Medical Office 1.5
+ MAS240 Applied EKG 1
+ MAS260 Clinical Procedures 3
+ MAS265 Administration of Medication 3
+ MAS274 Administrative Medical Assisting Externship 1
+ MAS275 Clinical Medical Assisting Externship 2
+ MAS280 Medical Assisting Program Review 1
+ PLB109 Phlebotomy: Basic Skills 1
+ PLB110 Practicum: Fundamental Phlebotomy Skills 0.5

Option 2: 30 Credits
HCC130 Fundamentals in Health Care Delivery 3
+ MAS126 Administrative Procedures 3
+ MAS127 Insurance, Billing and Coding 3
+ MAS128 Electronic Health Records for Medical Assisting 2
+ MAS129 Automated Computer System for Medical Office Management 2
+ MAS130 Orientation to the Pathophysiology and Psychology of Body Systems 1
+ MAS210 Aseptic Techniques 1
+ MAS220 Laboratory Testing in Patient Care Service Centers 1
+ MAS230 Emergencies in the Medical Office 1.5
+ MAS240 Applied EKG 1
+ MAS260 Clinical Procedures 3
+ MAS265 Administration of Medication 3
+ MAS274 Administrative Medical Assisting Externship 1
+ MAS275 Clinical Medical Assisting Externship 2
+ MAS280 Medical Assisting Program Review 1
+ PLB109 Phlebotomy: Basic Skills 1
+ PLB110 Practicum: Fundamental Phlebotomy Skills 0.5

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Department Chairperson: Ms. L. Parmelee  
Program Director: Ms. S. Ketcham  
Contact: (602) 285-7295 and/or  
marty.minton@pcmail.maricopa.edu

Medical Front Office—Modified Occupational Program  
Certificate of Completion – CCL 5295  
11-14 Credits  
The Certificate of Completion (CCL) in Medical Front Office program provides education and training for employment in physicians' offices group medical practices, and other healthcare settings. Medical Front Office personnel perform administrative duties including management and maintenance of the office, receiving patients and their family members, acting as an informational and educational resource for the patient, handling telephone and written communications, managing patient records, bookkeeping, filing, insurance processing, typing, appointment scheduling and managing public relations. Students in the Medical Front Office program may be in contact with potentially infectious blood, tissues, and body fluids.

Program Notes:  
+ indicates course has prerequisites and/or corequisites.  
Students must earn a grade of "C" or better for all courses required within the program.

Admission Criteria:  
Formal application and admission to the program is required.  
Completion of Program Prerequisites.  
Must be a high school graduate or equivalent.  
Have the ability to fully participate in classroom, laboratory, and clinical setting program activities.  
Submit current CPR card for Health Care Provider (American Heart Association approved) and maintain current status throughout the externship(s).  
Complete and submit the required proof of immunity and health declaration form signed by a licensed health care provider.  
Submit current fingerprinting clearance card.

Program Prerequisites: 0-3 Credits  
HCC145 Medical Terminology for Health Care Workers (3) OR  
Permission of Program Director.

Required Courses: 11-14 Credits  
The credit hour range is subject to change, depending on the student's educational experiences.

OPTION 1: 11 Credits  
HCC130 (3.0) is waived for students who have completed an Associate in Applied Science degree or higher degree in a health science discipline from a regionally accredited institution of higher education recognized by the Maricopa Community Colleges.  
+ MAS126 Administrative Procedures  
+ MAS127 Insurance, Billing and Coding  
+ MAS128 Electronic Health Records for Medical Assisting  
+ MAS129 Automated Computer System for Medical Office Management  
+ MAS274 Administrative Medical Assisting Externship

OPTION 2: 14 Credits  
HCC130 Fundamentals in Health Care Delivery  
+ MAS126 Administrative Procedures  
+ MAS127 Insurance, Billing and Coding  
+ MAS128 Electronic Health Records for Medical Assisting  
+ MAS129 Automated Computer System for Medical Office Management  
+ MAS274 Administrative Medical Assisting Externship

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.
Department Chairperson: Ms. L. Parmelee
Program Director: Ms. R. Helminski
Contact: (602) 285-7295 and/or
marty.minton@pcmail.maricopa.edu

Phlebotomy — Modified Occupational Program
Certificate of Completion – CCL 5279
4.5-8.5 Credits
This Certificate of Completion (CCL) in Phlebotomy program is designed to prepare a person to obtain blood
specimens by skin puncture and venipuncture. The phlebotomist may find employment in hospitals, patient service
centers, life insurance companies, doctors' offices, outreach services, and donor centers. Students in the Phlebotomy
program will be in contact with potentially infectious blood, tissues, and body fluids.

Upon satisfactory completion of the program, the students are eligible to take a national certification examination.

Program Notes:
+ indicates course has prerequisites and/or corequisites.
Students must earn a grade of "C" or better in all courses within the program.
A special application must be completed in order to be officially accepted into the program. For further information,
contact the Program Director or a Program Advisor for Health Professions and Nursing in the Advisement Center.

Admission Criteria:
High School diploma or GED.
Ability to fully participate in classroom, laboratory, or clinical setting program activities.
Submit current CPR card for Health Care Provider and maintain current status throughout the practicum(s).
Proof of current immunization: Measles, Mumps, and Rubella (MMR), Tuberculosis skin test (TB), Varicella,
Tetanus/Diphtheria (Td), and Hepatitis B (HEB) vaccine.
Complete and submit the required proof of immunity and health declaration form signed by a licensed health care
provider.
Submit to a drug screening and demonstrate negative results.
Submit current fingerprinting clearance card.
Formal application and admission to the program are required. Applications can be obtained from the Program
Director, a Health Professions Advisor, or from the Phoenix College web site.

Program Prerequisites: None

Required Courses: 4.5-8.5 Credits
Credit hours are subject to change depending on the student's educational experience.
Students must select one of the following two options.

Option I is available for students who have completed an Associate in Applied Science degree or higher degree in a
health science discipline from a regionally accredited institution of higher education recognized by Maricopa
Community College District OR for the student who has one year or more of documented experience as a licensed or
certified health care provider.

OPTION I: 4.5 Credits
+ PLB109 Phlebotomy: Basic Skills 1
+ PLB111 Specimen Processing and Advanced Techniques in Phlebotomy Procedures 1
+ PLB122 Practicum: Phlebotomy and Specimen Processing 2.5

OPTION II: 8.5 Credits
HCC130 Fundamentals in Health Care Delivery 3
HCC145AA Medical Terminology for Health Care Workers I 1
+ PLB109 Phlebotomy: Basic Skills 1
+ PLB111 Specimen Processing and Advanced Techniques in Phlebotomy Procedures 1
+ PLB122 Practicum: Phlebotomy and Specimen Processing 2.5

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the
time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Advanced Emergency Medical Technology (Paramedic) — Modified Occupational Program

Associate in Applied Science – AAS 3065

60.5 Credits

The Associate in Applied Science (AAS) in Advanced Emergency Medical Technology (Paramedic) is designed to provide advanced techniques of emergency care, stabilization, and immobilization of victims of illness and injury. The techniques of emergency care include but are not limited to assessment, detailed physical examination, recognition and documentation of signs and symptoms of illness and injury, critical thinking and diagnosis intervention, and the evaluation of the interventions. The techniques of assessment include but are not limited to electrocardiograph rhythm identification, administration of oxygen, defibrillation, synchronized cardioversion, transcutaneous pacing, and advanced airway techniques. The techniques for immobilization of the victim include but are not limited to the use of specific immobilization devices, peripheral intraosseous and central intravenous techniques, and preparation and care during transportation. A Certificate of Completion (CCL) is also available.

Program Notes:
Students must earn a grade of “C” or better in all courses required within the program.
+ indicates course has prerequisites and/or corequisites.

Admission Criteria:
Prior to being considered for and accepted into the program, students may be required to complete specified exams with the EMT/FSC department. Students should seek department advisement on completing program prerequisites prior to acceptance into the program.

Program Prerequisites: 9-12 Credits
+ EMT/FSC104 Basic Emergency Medical Technology 9
+ CRE101 College Critical Reading (3) OR
+ CRE111 Critical Reading for Business and Industry (3) OR
  Equivalent as indicated by assessment 0-3

Required Courses: 38.5 Credits
+ EMT235 Emergency Cardiac Care 3
+ EMT236 Pharmacology in an Emergency Setting 3
+ EMT272AA Advanced Emergency Medical Technology (12.5) AND
+ EMT272AB Advanced Emergency Medical Technology (12.5) 25
+ EMT272LL Advanced Emergency Medical Technology Practicum 7.5

General Education Requirements: 22 Credits

General Education Core: 12 Credits

First-Year Composition: 6 Credits
Any approved general education courses in the First-Year Composition area. 6

Oral Communication: 3 Credits
COM100 Introduction to Human Communication 3

Critical Reading: 0 Credits
Met by CRE101 or CRE111, in Program Prerequisites area. 0

Mathematics: 3 Credits
Any approved general education course in the Mathematics area. 3
General Education Distribution: 10 Credits
Humanities and Fine Arts: 3 Credits
   Any approved General Education course in the Humanities and Fine Arts area. 3
Social and Behavioral Sciences: 3 Credits
   Any approved General Education course in the Social and Behavioral Sciences area. 3
Natural Sciences: 4 Credits
   BIO160 Introduction to Human Anatomy and Physiology 4

Department Chairperson: Mr. R. Wilson
Program Director: Mr. S. Crowley
Contact: (602) 285-7210

Advanced Emergency Medical Technology (Paramedic) — Modified Occupational Program
Certificate of Completion – CCL 5513 [ ]
37.5 Credits
The Certificate of Completion (CCL) in Advanced Emergency Medical Technology (Paramedic) is designed to provide advanced techniques of emergency care, stabilization, and immobilization of victims of illness and injury. The techniques of emergency care include but are not limited to assessment, detailed physical examination, recognition and documentation of signs and symptoms of illness and injury, critical thinking and diagnosis intervention, and the evaluation of the interventions. The techniques of assessment include but are not limited to electrocardiograph rhythm identification, administration of oxygen, defibrillation, synchronized cardioversion, transcutaneous pacing, and advanced airway techniques. The techniques for immobilization of the victim include but are not limited to the use of specific immobilization devices, peripheral intraosseous and central intravenous techniques, and preparation and care during transportation. An Associate in Applied Science (AAS) is also available.

Program Notes:
Students must earn a grade of "C" or better in all courses required within the program.
+ indicates course has prerequisites and/or corequisite

Admission Criteria:
Prior to being considered for and accepted into the program, students must complete specified exams and an oral interview with the EMT/FSC department. Additionally, students must have a recommendation from a referring agency. Finally, students should seek department advisement on completing program prerequisites prior to acceptance into the program.

Program Prerequisites: 9 Credits
+ Basic Emergency Medical Technology Certificate (5643) 9

Required Courses: 34.5 Credits
+ EMT245 Trauma Management I 2
++ EMT272AA Advanced Emergency Medical Technology (12.5) AND EMT272AB Advanced Emergency Medical Technology (12.5) 25
+ EMT272LL Advanced Emergency Medical Technology Practicum 7.5

Restricted Electives: 3-4 Credits
SPA101, Elementary Spanish I, recommended.
+ EMT120 Spanish for Emergency-Care Providers 1
+ EMT165 Pediatric Education for Prehospital Providers: Basic 2
+ EMT240 Advanced Cardiac Life Support 2
+ EMT242 Pediatric Advanced Life Support 1
+ EMT246 Trauma Management II 4
+ SPA101 Elementary Spanish I 4

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Revised: 9/2/2011; 10/28/11; 12/7/11
Basic Emergency Medical Technology (Paramedic) — Modified Occupational Program
Certificate of Completion – CCL 5643
9 Credits
This Certificate of Completion (CCL) includes techniques of emergency care, stabilization, and immobilization of victims of illness and injury. Recognition and documentation of signs and symptoms of illness and injury, intervention, and evaluation of the intervention, techniques for assessment, administration of oxygen, use of specific immobilization devices, and preparation for transportation are other areas of the program. This program is a prerequisite to the Intermediate and Advanced EMT programs.

Program Notes:
Students must earn a grade of "C" or better in all courses within the program.
+ indicates course has prerequisites and/or corequisites

Admission Criteria: None

Program Prerequisites: 0.5-3 Credits
+ CRE101 College Critical Reading (3) OR
+ CRE111 Critical Reading for Business and Industry (3) OR
   Equivalent by assessment
EMT/HLR101 Cardiopulmonary Resuscitation/Basic Cardiac Life Support (0.5) OR
   Basic Life Support (BLS) Health Care Provider/Professional Rescuer
   3

Required Courses: 9 Credits
+ EMT/FSC104 Basic Emergency Medical Technology
   9

Intermediate Emergency Medical Technology (Paramedic) — Modified Occupational Program
Certificate of Completion – CCL 5271
25 Credits
The Certificate of Completion (CCL) in Intermediate Emergency Medical Technology is designed to provide advanced techniques of emergency care, stabilization, and immobilization of victims of illness and injury. The techniques of emergency care include but are not limited to assessment, detailed physical examination, recognition and documentation of signs and symptoms of illness and injury, and the evaluation of the interventions. The techniques of assessment include but are not limited to electrocardiograph rhythm identification, administration of oxygen, defibrillation, synchronized cardioversion, transcutaneous pacing, and advanced airway techniques. The techniques for immobilization of the victim include but are not limited to the use of specific immobilization devices, peripheral intraosseous and intravenous techniques, and preparation and care during transportation.

Program Notes:
Students must earn a grade of "C" or better in all courses required within the program.
+ indicates course has prerequisites and/or corequisites

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Admission Criteria:
Prior to being considered for and accepted into the program, students must complete specified exams and an oral interview with the EMT/FSC department. Additionally, students must have a recommendation from a referring agency. Finally, students should seek department advisement on completing program prerequisites prior to acceptance into the program.

Program Prerequisites: 22 Credits
- BIO160 Introduction to Human Anatomy and Physiology 4
- EMT/FSC104 Basic Emergency Medical Technology 9
- EMT235 Emergency Cardiac Care 3
- ENG101 First-Year Composition (3) OR
- ENG107 First Year Composition for ESL (3) 3
- MAT102 Mathematical Concepts/Applications (3) OR
  Equivalent OR
  Satisfactory score on District placement exam 3

Required Courses: 25 Credits
- EMT208 Intermediate Emergency Medical Technology 16
- EMT208AA Intermediate Emergency Medical Technology Practicum 2
- EMT236 Pharmacology in an Emergency Setting 3
- EMT/FSC238 Vehicular Extrication and Patient Stabilization 2
- EMT245 Trauma Management I

HOSPITALITY AND TOURISM

Department Chairperson: Ms. S. Phillips
Program Director: Ms. A. Villarreal
Contact: (602) 285-7894 and/or
sylvia.phillips@pcmail.maricopa.edu

Commercial Baking— Editorial Changes: FON to CUL
Certificate of Completion – CCL 5534
13 Credits
The Certificate of Completion (CCL) in Commercial Baking prepares students who want to specialize in the pastry aspect of the food service industry. Instruction includes principles and techniques such as chocolate techniques, rolled decor media, sugar work, special occasion, and wedding cakes, showpieces, and desserts for special diets.

Program Notes:
Students must earn a grade of "C" or better for all courses within the program.

Admission Criteria: None

Program Prerequisites: None

Required Courses: 13 Credits
- CUL113 Commercial Baking Techniques 3
- CUL127 Commercial Baking: Classical Desserts 3
- CUL215 Advanced Pastry Arts 3
- FON104 Certification in Food Service Safety and Sanitation 1
- FON241 Principles of Human Nutrition 3

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Revised: 9/2/2011; 10/28/11; 12/7/11
Department Chairperson: Ms. S. Phillips  
Program Director: Ms. A. Villarreal  
Contact: (602) 285-7894 and/or  
sylvia.phillips@pcmail.maricopa.edu

**Commercial Food Preparation — Editorial Changes: FON to CUL**

**Certificate of Completion – CCL 5732**  
13-14 Credits

The Certificate of Completion (CCL) in Commercial Food Preparation includes principles and hands-on training required for basic entry-level cooking positions.

**Program Notes:**  
+ indicates course has prerequisites and/or corequisites.

**Admission Criteria: None**

**Program Prerequisites: None**

**Required Courses:** 7 Credits  
Students must earn a grade of "C" or better for all courses within the "Required Courses" area.

- CUL105  
  Principles and Skills for Professional Cooking  
  3 Credits
- CUL113  
  Commercial Baking Techniques  
  3 Credits
- FON104  
  Certification in Food Service and Safety and Sanitation  
  1 Credit

**Restricted Electives:** 6-7 Credits

- CUL201  
  International Cuisine  
  3 Credits
- CUL203  
  American Regional Cuisines  
  3 Credits
- CUL205  
  French Cuisine  
  3 Credits
- CUL207  
  Pacific Rim Cuisine  
  3 Credits
- + CUL211  
  Professional Cooking Practicum  
  7 Credits

Department Chairperson: Ms. S. Phillips  
Program Director: Ms. A. Villarreal  
Contact: (602) 285-7894 and/or  
sylvia.phillips@pcmail.maricopa.edu

**Culinary Studies — Editorial Changes: FON to CUL**

**Associate in Applied Science – AAS 3063**  
62 Credits

The Associate in Applied Science (AAS) degree in Culinary Studies is designed to teach basic cooking principles and techniques in a state-of-the-art setting. The emphasis is on skills needed for employment in a commercial food operation where food is prepared and served in volume. Instruction includes principles of professional cooking and baking, volume food production, food sanitation and safety, purchasing, menu planning, customer service, and basic nutrition concepts. A Certificate of Completion (CCL) is also available.

**Program Notes:**  
+ indicates course has prerequisites and/or corequisites.  
++ indicates any module.  
Students must earn a grade of "C" or better in all courses within the program.

**Admission Criteria: None**

**Program Prerequisites: None**

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**NOTE:** This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
**Required Courses:** 32 Credits

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CUL105</td>
<td>Principles and Skills for Professional Cooking</td>
<td>3</td>
</tr>
<tr>
<td>CUL107</td>
<td>Principles and Techniques of Garde Manger</td>
<td>3</td>
</tr>
<tr>
<td>CUL109/HRM102</td>
<td>Menu Planning Development</td>
<td>2</td>
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<tr>
<td>CUL113</td>
<td>Commercial Baking Techniques</td>
<td>3</td>
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<td>+ CUL123</td>
<td>Customer Service Practicum</td>
<td>4</td>
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<tr>
<td>FON104</td>
<td>Certification in Food Service Safety and Sanitation</td>
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Students must select six (6) credits from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CUL127</td>
<td>Commercial Baking: Classical Desserts (3) OR</td>
<td></td>
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<tr>
<td>CUL201</td>
<td>International Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>CUL203</td>
<td>American Regional Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>CUL205</td>
<td>French Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>CUL207</td>
<td>Pacific Rim Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>+ CUL215</td>
<td>Advanced Pastry Arts (3)</td>
<td>6</td>
</tr>
<tr>
<td>CUL111</td>
<td>Purchasing for Food Service Systems</td>
<td>3</td>
</tr>
<tr>
<td>+ CUL211</td>
<td>Professional Cooking Practicum</td>
<td>7</td>
</tr>
</tbody>
</table>

**Restricted Electives:** 6 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC111</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
<tr>
<td>BPC++++++</td>
<td>Any BPC Course(s).</td>
<td>1-3</td>
</tr>
<tr>
<td>CIS++++++</td>
<td>Any CIS Course(s).</td>
<td>1-3</td>
</tr>
<tr>
<td>FON++++++</td>
<td>Any FON Course(s) except courses used to satisfy Required Courses area.</td>
<td>3</td>
</tr>
<tr>
<td>GBS131</td>
<td>Business Calculations</td>
<td>3</td>
</tr>
<tr>
<td>GBS205</td>
<td>Legal, Ethical, and Regulatory Issues in Business</td>
<td>3</td>
</tr>
<tr>
<td>MGT229</td>
<td>Management and Leadership I</td>
<td>3</td>
</tr>
<tr>
<td>MGT253</td>
<td>Owning and Operating a Small Business</td>
<td>3</td>
</tr>
<tr>
<td>MKT271</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Requirements:** 24-27 Credits

**General Education Core:** 15-17 Credits

**First-Year Composition:** 6 Credits

+ Any approved General Education courses in the First-Year Composition area. 6

**Oral Communication:** 3 Credits

Any approved General Education course in the Oral Communication area. 3

**Critical Reading:** 3 Credits

+ Any approved General Education course in the Critical Reading area. 3

**Mathematics:** 3-5 Credits

Any approved General Education course in the Mathematics area. 3-5

**General Education Distribution:** 9-10 Credits

**Humanities and Fine Arts:** 2-3 Credits

Any approved General Education course in the Humanities and Fine Arts area. 2-3

**Social and Behavioral Sciences:** 3 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN211</td>
<td>Macroeconomic Principles (3) OR</td>
<td></td>
</tr>
<tr>
<td>ECN212</td>
<td>Microeconomic Principles (3) OR</td>
<td></td>
</tr>
<tr>
<td>PSY101</td>
<td>Introduction to Psychology (3) OR</td>
<td></td>
</tr>
<tr>
<td>SOC101</td>
<td>Introduction to Sociology (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Natural Sciences:** 4 Credits

+ FON241     | Principles of Human Nutrition                      | 3       |
+ FON241LL   | Principles of Human Nutrition Laboratory           | 1       |

**NOTE:** This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Culinary Studies — Editorial Changes: FON to CUL

Certificate of Completion – CCL 5516 ☑
35 Credits

The Certificate of Completion (CCL) in Culinary Studies is designed to teach basic cooking principles and techniques in a state-of-the-art setting. Emphasis is on skills needed for employment in a commercial food operation where food is prepared and served in volume. Instruction includes principles of professional cooking and baking, volume food production, food sanitation and safety, purchasing, menu planning, customer service, and basic nutrition concepts. An Associate in Applied Science (AAS) degree is also available.

Program Notes:
+ indicates course has prerequisites and/or corequisites.
Students must earn a grade of "C" or better in all courses within the program.

Admission Criteria: None

Program Prerequisites: None

Required Courses: 35 Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL105</td>
<td>Principles and Skills for Professional Cooking</td>
<td>3</td>
</tr>
<tr>
<td>CUL107</td>
<td>Principles and Techniques of Garde Manger</td>
<td>3</td>
</tr>
<tr>
<td>CUL109/HRM102</td>
<td>Menu Planning Development</td>
<td>2</td>
</tr>
<tr>
<td>CUL113</td>
<td>Commercial Baking Techniques</td>
<td>3</td>
</tr>
<tr>
<td>+ CUL123</td>
<td>Customer Service Practicum</td>
<td>4</td>
</tr>
<tr>
<td>FON104</td>
<td>Certification in Food Service Safety and Sanitation</td>
<td>1</td>
</tr>
</tbody>
</table>

Students must select six (6) credits from the following courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL127</td>
<td>Commercial Baking: Classical Desserts (3) OR</td>
<td></td>
</tr>
<tr>
<td>CUL201</td>
<td>International Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>CUL203</td>
<td>American Regional Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>CUL205</td>
<td>French Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>CUL207</td>
<td>Pacific Rim Cuisine (3) OR</td>
<td></td>
</tr>
<tr>
<td>+ CUL215</td>
<td>Advanced Pastry Arts (3)</td>
<td>6</td>
</tr>
<tr>
<td>CUL111</td>
<td>Purchasing for Food Service Systems</td>
<td>3</td>
</tr>
<tr>
<td>+ CUL211</td>
<td>Professional Cooking Practicum</td>
<td>7</td>
</tr>
<tr>
<td>+ FON241</td>
<td>Principles of Human Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>
Food Service Administration — Editorial Changes: FON to CUL

Associate in Applied Science – AAS 3368
61-64 Credits
The Food Service Administration Associate in Applied Science (AAS) Program offers excellent opportunities for training in the quantity foods industry. The curriculum is planned to train for beginning supervisory positions in industrial and school cafeterias, hospitals, long term care facilities, restaurants, hotels, and other operations where food is served in quantity. Instruction includes theory and practical applications in nutrition, menu planning and analysis, food sanitation and safety, purchasing, management and supervision, and commercial food preparation. A Certificate of Completion (CCL) is also available.

Program Notes:
+ indicates course has prerequisites and/or corequisites.
++ indicates any module.
Students must earn a grade of "C" or better in all courses within the program.

Admission Criteria: None

Program Prerequisites: None

Required Courses: 18 Credits
- CUL105 Principles and Skills for Professional Cooking 3
- CUL109/HRM102 Menu Planning Development 2
- CUL111 Purchasing for Food Service Systems 3
- CUL113 Commercial Baking Techniques 3
- CUL223 Food Service Management 3
- CUL225 Supervisory Functions in Food Service 3
- FON104 Certification in Food Service Safety and Sanitation 1

Restricted Electives: 19 Credits
Students should select from the following courses in consultation with a department advisor.
- ACC111 Accounting Principles I 3
- BPC+++++ Any BPC Business Personal Computers course(s) OR 3
- CIS+++++ Any CIS Computer Information Systems Course(s) 1-3
- FON+++++ Any FON Food and Nutrition course(s) not listed in the Required Courses area. 9
- GBS131 Business Calculations 3
- GBS151 Introduction to Business 3
- GBS205 Legal, Ethical, and Regulatory Issues in Business 3
- MGT175 Business Organization and Management 3
- MGT253 Owning and Operating a Small Business 3
- MKT271 Principles of Marketing 3

General Education Requirements: 24-27 Credits

General Education Core: 15-17 Credits
First-Year Composition: 6 Credits
+ Any approved General Education courses from the First-Year Composition area. 6
Oral Communication: 3 Credits
Any approved General Education course from the Oral Communication area. 3

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Critical Reading: 3 Credits
+ Any approved General Education course from the Critical Reading area. 3

Mathematics: 3-5 Credits
+ Any approved General Education course from the Mathematics area. 3-5

General Education Distribution: 9-10 Credits

Humanities and Fine Arts: 2-3 Credits
+ Any approved General Education course from the Humanities and Fine Arts area. 2-3

Social and Behavioral Sciences: 3 Credits
- ECN211 Macroeconomic Principles (3) OR 3
- ECN212 Microeconomic Principles (3) OR 3
- PSY101 Introduction to Psychology (3) OR 3
- SOC101 Introduction to Sociology (3) 3

Natural Sciences: 4 Credits
+ FON241 Principles of Human Nutrition 3
+ FON241LL Principles of Human Nutrition Laboratory 1

Department Chairperson: Ms. S. Phillips
Program Director: Ms. A. Villarreal
Contact: (602) 285-7894 and/or
sylvia.phillips@pcmail.maricopa.edu

Food Service Administration — Editorial Changes: FON to CUL
Certificate of Completion – CCL 5368

21 Credits
The Certificate of Completion (CCL) in Food Service Administration program offers excellent opportunities for training in the quantity foods industry. The curriculum is planned to train for beginning supervisory positions in industrial and school cafeterias, hospitals, long term care facilities, restaurants, hotels and other operations where food is served in quantity. Instruction includes theory and practical application in nutrition, menu planning and analysis, food sanitation and safety, purchasing, management and supervision, and commercial food preparation. An Associate in Applied Science (AAS) degree is also available.

Program Notes:
+ indicates course has prerequisites and/or corequisites.
Students must earn a grade of "C" or better for all courses within the program.

Admission Criteria: None

Program Prerequisites: None

Required Courses: 21 Credits
- CUL105 Principles and Skills for Professional Cooking 3
- CUL109/HRM102 Menu Planning Development 2
- CUL111 Purchasing for Food Service Systems 3
- CUL113 Commercial Baking Techniques 3
- CUL223 Food Service Management 3
- CUL225 Supervisory Functions in Food Service 3
- FON104 Certification in Food Service Safety and Sanitation 1
- FON241 Principles of Human Nutrition 3

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Professional Food and Beverage Service — Editorial Changes: FON to CUL
Certificate of Completion – CCL 5364
15 Credits
The Certificate of Completion (CCL) in Professional Food and Beverage Service is designed to prepare the student for employment as a professional food server in the finer dining establishments. Coursework emphasizes the theoretical and practical aspects of food and beverage service and includes food sanitation and safety, exposure to professional cooking, and basic nutrition concepts.

Program Notes:
+ indicates course has prerequisites and/or corequisites.

Admission Criteria: None

Program Prerequisites: None

Required Courses: 15 Credits
Students must earn a grade of "C" or better for each course listed in the "Required Courses" area.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL105</td>
<td>Principles and Skills for Restaurant Cooking</td>
<td>3</td>
</tr>
<tr>
<td>CUL121</td>
<td>Principles of Food and Beverage Service</td>
<td>3</td>
</tr>
<tr>
<td>CUL123</td>
<td>Customer Service Practicum</td>
<td>4</td>
</tr>
<tr>
<td>CUL145</td>
<td>Banquet Food and Beverage Service Externship</td>
<td>1</td>
</tr>
<tr>
<td>FON100</td>
<td>Introductory Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FON104</td>
<td>Certification in Food Service Safety and Sanitation</td>
<td>1</td>
</tr>
</tbody>
</table>

LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

Driver Operator – Modified Occupational Program
Certificate of Completion – CCL 5418 *
8 Credits
The Certificate of Completion (CCL) in Driver Operator program is designed for students who need (1) advanced training as professional firefighters, (2) preparation courses for career advancement opportunities in fire services, and/or (3) more comprehensive information about the role and function of an emergency vehicle driver/operator.

Program Notes:
Students must earn a grade of "C" or better in all courses required within the program.

Admission Criteria:
Acceptance into the program and permission of Program Director is required.

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.
Program Prerequisites: None

Required Courses: 8 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC111</td>
<td>Emergency Vehicle Driver Operator</td>
<td>2</td>
</tr>
<tr>
<td>FSC117</td>
<td>Fire Apparatus</td>
<td>3</td>
</tr>
<tr>
<td>FSC118</td>
<td>Fire Hydraulics</td>
<td>3</td>
</tr>
</tbody>
</table>

Department Chairperson: Mr. R. Wilson
Program Director: Mr. S. Crowley
Contact: (602) 285-7210

Emergency Response and Operations – Modified Occupational Program
Associate in Applied Science – AAS 3112
60 Credits

The Associate in Applied Science (AAS) in Emergency Response and Operations program provides students with a curriculum specific to the student's individual needs in addition to the knowledge and skills needed in today's changing public safety workplace. The program develops education, skills, and techniques for planning, responding, and mitigating various emergency situations within the student's specific discipline with emphasis on effective response and operations. The curriculum combines coursework in public safety emergency services with a general education component.

Program Notes:
Students must earn a grade of "C" or better for all courses required within the program.
+ indicates course has prerequisites and/or corequisites.
++ indicates any module.

Admission Criteria:
Students pursuing Track I, Fire Operations, OR
Track II, Advanced Emergency Medical Technology-Paramedic, may be required to complete a program entrance exam as appropriate
OR
Permission of Program Director

Program Prerequisites: 0-9 Credits

Track I, Fire Operations
+ EMT/FSC104 Basic Emergency Medical Technology (9) OR
Permission of Program Director

OR

Track II, Advanced Emergency Medical Technology-Paramedic
Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer OR
+ EMT235 Emergency Cardiac Care (3) AND
+ EMT236 Pharmacology in an Emergency Setting (3) OR
Permission of Program Director

OR

Advanced cardiac life support course OR
Emergency cardiac care course, AND
EMT-Paramedic certification AND
Current employment as an EMT Paramedic
OR
Permission of Program Director

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
Required Courses: 17.5-24 Credits
Students must select one (1) of the following five (5) tracks:

**Track I: Fire Operations** 18 Credits
+ FSC102 Fire Department Operations 11
FSC105 Hazardous Materials/First Responder 3
FSC130 Fitness for Firefighters/CPAT 1
FSC134 Fitness and Conditioning/Firefighters 3

**Track II: Advanced Emergency Medical Technology-Paramedic** 17.5 Credits
+ EMT242 Pediatric Advanced Life Support (1) OR
+ EMT265 Pediatric Education for Prehospital Providers: Advanced (1) 1
+ EMT240 Advanced Cardiac Life Support 2
+ EMT245 Trauma Management I 2
+ EMT272AA Advanced Emergency Medical Technology 12.5

**Track III: Emergency Management** 18 Credits
AJS/DPR/FSC139 Emergency Response to Terrorism 3
AJS/DPR/FSC146 Disaster Recovery Operations 3
AJS/DPR/FSC147 Emergency Preparedness 3
AJS/DPR/FSC148 Fundamentals of Emergency Management 3
AJS/DPR/FSC149 Hazard Mitigation 3
FSC224 Incident Command Systems 3

**Track IV: Fire Science** 24 Credits
FSC105 Hazardous Materials First Responder 3
FSC108 Fundamentals of Fire Prevention 3
FSC113 Introduction to Fire Suppression 3
FSC117 Fire Apparatus 3
FSC119 Introduction Fire Service Ethics 3
AJS/DPR/FSC147 Emergency Preparedness (3) OR 3
AJS/DPR/FSC148 Fundamentals of Emergency Management (3) 3
+ FSC208 Firefighter Safety and Building Construction 3
FSC215 Customer Service in the Public Sector 3

**Track V: Fire Investigation** 24 Credits
FSC105 Hazardous Materials/First Responder 3
FSC108 Fundamentals of Fire Prevention 3
FSC119 Introduction Fire Service Ethics 3
+ FSC208 Firefighter Safety and Building Construction 3
FSC209 Fire Investigation I 3
+ FSC210 Fire Investigation II 3
+ FSC211 Fire Investigation III 3
+ FSC212 Fire Investigation IV 3

**Restricted Electives:** 14-20.5 Credits
Students should select 14-20.5 credits from the following, except any courses used to satisfy Required Courses area.

AJS+++++ Any approved AJS prefixed course 1-6
DPR+++++ Any approved DPR prefixed course 1-6
EMT+++++ Any approved EMT prefixed course 1-6
FSC+++++ Any approved FSC prefixed course 1-6
LET+++++ Any approved LET prefixed course 1-6

**NOTE:** This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
General Education Requirements: 22-25 Credits

General Education Core: 12-15 Credits
First-Year Composition: 6 Credits
  + Any approved general education courses in the First-Year Composition area. 6
Oral Communication: 3 Credits
  Any approved general education course from the Oral Communication area. 3
Critical Reading: 0-3 Credits
  + Any approved general education course from the Critical Reading area. 0-3
Mathematics: 3 Credits
  Any approved general education course from the Mathematics area. 3

General Education Distribution: 10 Credits
Humanities and Fine Arts: 3 Credits
  Any approved general education course from the Humanities and Fine Arts area. 3
Social and Behavioral Sciences: 3 Credits
  Any approved general education course from the Social and Behavioral Sciences area. 3
Natural Sciences: 4 Credits
  Any approved general education course from the Natural Sciences area. 4

Department Chairperson: Mr. R. Wilson
Program Director: Mr. D. Dodt
Contact: (602) 285-7210

Firefighter Operations – Modified Occupational Program
Certificate of Completion – CCL 5557 5557 5557
17-27 Credits
The Certificate of Completion (CCL) in Firefighter Operations program provides the opportunity for individuals seeking employment in various firefighting settings to acquire the minimum standard firefighting skills needed in the field.

Program Notes:
Students must earn a grade of "C" or better in all courses required within the program.
+ indicates course has prerequisites and/or corequisites.

Admission Criteria:
Completion of Program Prerequisites.
Formal application and admission to the program is required.

Program Prerequisites: 3-13 Credits
+ EMT/FSC104 Basic Emergency Medical Technology (9) OR Permission of Program Director 0-9
  FSC105 Hazardous Materials/First Responder 3
  FSC130 Fitness for Firefighters/CPAT (1) OR Permission of Program Director 0-1

Required Courses: 14 Credits
+ FSC102 Fire Department Operations 11
  FSC134 Fitness and Conditioning for Firefighters 3

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Revised: 9/2/2011; 10/28/11; 12/7/11
**Fire Investigation – Modified Occupational Program**

**Certificate of Completion – CCL 5744**

12 Credits

The Certificate of Completion (CCL) in Fire Investigation program provides educational credentials to industry certification for Fire Investigators. Fire Investigation series I-IV is the regional standard in Arizona for professional Fire Investigators in the private and public sectors. The degree option provides a comprehensive approach to knowledge, skills, and theory related to the practice of Fire Investigation.

**Program Notes:**
+ indicates course has prerequisite and/or corequisites.
Students must earn a grade of "C" or better in all courses within the program.

**Admission Criteria:** None

**Program Prerequisites:** None

**Required Courses:** 12 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC209</td>
<td>Fire Investigation I</td>
<td>3</td>
</tr>
<tr>
<td>+ FSC210</td>
<td>Fire Investigation II</td>
<td>3</td>
</tr>
<tr>
<td>+ FSC211</td>
<td>Fire Investigation III</td>
<td>3</td>
</tr>
<tr>
<td>+ FSC212</td>
<td>Fire Investigation IV</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fire Officer Leadership – Modified Occupational Program**

**Certificate of Completion – CCL 5420**

15 Credits

The Certificate of Completion (CCL) in Fire Officer Leadership program can be used by professional firefighters for promotions and salary advancement within the Fire Services. The program will provide courses for experienced professional firefighters who desire to learn advanced fireground tactics and strategy, building construction, practical incident command, supervisory training of personnel, and human resource management.

**Program Notes:**
+ indicates course has prerequisites and/or corequisites.
Students must earn a grade of "C" or better for all courses listed in the program.

**Admission Criteria:**
Formal application and acceptance into the Fire Officer Leadership program or permission of Program Director.

**Program Prerequisites:** None

**Required Courses:** 15 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC202</td>
<td>Supervisory Training for Firefighters</td>
<td>3</td>
</tr>
<tr>
<td>+ FSC204</td>
<td>Firefighting Tactics and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>+ FSC205</td>
<td>Command Strategies for Major Emergencies</td>
<td>3</td>
</tr>
<tr>
<td>+ FSC208</td>
<td>Firefighter Safety and Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>+ FSC214</td>
<td>Human Resources Management in Fire Service</td>
<td>3</td>
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</tbody>
</table>

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Revised: 9/2/2011; 10/28/11; 12/7/11
Fire Science – Modified Occupational Program
Certificate of Completion – CCL 5486
24 Credits
The Certificate of Completion (CCL) in Fire Science program is designed for students who need (1) advanced training as professional firefighters, (2) basic preparation courses for a career in fire services and/or (3) more comprehensive information about the fire hazard and prevention. Certificate can be used by professional firefighters for promotions and salary advancement within the Fire Services. The program will provide courses for plant safety for fire protection personnel and basic emergency services for laypersons who need intensive first aid training. The unique feature of the program is that the instructors are professional firefighters and/or licensed Emergency Medical Training Personnel.

Program Notes:
Students must earn a grade of "C" or better in all courses within the program.
+ indicates course has prerequisites and/or corequisites.

Admission Criteria: None

Program Prerequisites: 9 Credits
+ EMT/FSC104 Basic Emergency Medical Technology 9

Required Courses: 24 Credits
- FSC105 Hazardous Materials/First Responder 3
- FSC108 Fundamentals of Fire Prevention 3
- FSC113 Introduction to Fire Suppression 3
- FSC117 Fire Apparatus 3
- FSC119 Introduction Fire Service Ethics 3
- AJSDPR/FSC147 Emergency Preparedness (3) OR
- AJSDPR/FSC148 Fundamentals of Emergency Management (3) 3
+ FSC208 Firefighter Safety and Building Construction 3
- FSC215 Customer Service in the Public Sector 3

Hazardous Materials Response – Modified Occupational Program
Certificate of Completion – CCL 5682
36 Credits
The Certificate of Completion (CCL) in Hazardous Materials Response program includes training in the use of chemical protective clothing, respiratory protection, air monitoring, equipment field sampling, spill control technology, decontamination, and controlling and stabilizing chemical releases to assist professionals to cope with hazardous materials incidents.

Program Notes:
Students must earn a grade of "C" or better in all courses within the program.
+ indicates course has prerequisites and/or corequisites.

Admission Criteria: None

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.
Revised: 9/2/2011; 10/28/11; 12/7/11
NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11

Program Prerequisites: None

Required Courses: 36 Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EMT/FSC104</td>
<td>Basic Emergency Medical Technology</td>
<td>9</td>
</tr>
<tr>
<td>FSC105</td>
<td>Hazardous Materials/First Responder</td>
<td>3</td>
</tr>
<tr>
<td>FSC108</td>
<td>Fundamentals of Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FSC113</td>
<td>Introduction to Fire Suppression</td>
<td>3</td>
</tr>
<tr>
<td>FSC125</td>
<td>Hazardous Materials Emergency Scene Management</td>
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<tr>
<td>FSC127</td>
<td>Codes/Regulations and Contingency Planning for Hazardous Materials Response</td>
<td>1</td>
</tr>
<tr>
<td>FSC128</td>
<td>Hazardous Materials Air Monitoring/Breathing Protection</td>
<td>1</td>
</tr>
<tr>
<td>FSC129</td>
<td>Physical Properties of Hazardous Materials</td>
<td>1</td>
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<tr>
<td>FSC132</td>
<td>Personnel Protective Equipment for Emergency Spill Control</td>
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<tr>
<td>+ FSC204</td>
<td>Firefighting Tactics and Strategy</td>
<td>3</td>
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<tr>
<td>+ FSC208</td>
<td>Firefighter Safety and Building Construction</td>
<td>3</td>
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<tr>
<td>+ FSC211</td>
<td>Fundamentals of Flammable Hazardous Materials</td>
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<tr>
<td>+ FSC212</td>
<td>Dangerous and Explosive Hazardous Materials</td>
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<tr>
<td>FSC213</td>
<td>Hazardous Categorization (Haz Cat)</td>
<td>1</td>
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</tbody>
</table>

ACADEMIC CERTIFICATE

Department Chairperson: Dr. A. Celoza
Program Director: Mr. R. McAllen-Walker
Contact: (602) 285-7759 and/or roland.walker@pcmail.maricopa.edu

American Indian Studies — Modified Academic Program
Academic Certificate — AC 6208
12 Credits
The Academic Certificate (AC) in American Indian Studies program explores the unique experiences of the American Indian people living in the Southwest and provides students the opportunity to study the cultures, values, histories, and contemporary lives of the indigenous people of North America. The Certificate includes courses that investigate their language, literature, arts, philosophy, religions, and politics.

Program Notes:
Students must earn a grade of "C" or better in all the courses within the program.
+ indicates course has prerequisites and/or corequisites
++ indicates any module.
Admission Criteria: None

Program Prerequisites: 3-6 Credits
+ ENG101 First-Year Composition (3) OR
+ ENG107 First-Year Composition for ESL (3)
+ CRE101 College Critical Reading (3) OR

Equivalent as indicated by assessment

Required Courses: 9 Credits
- AIS101 Survey of American Indian Issues 3
- AIS/HIS170 American Indian History of the Southwest 3
+ AIS213/REL203 American Indian Religions 3

Restricted Electives: 3 Credits
+ AIS++++ Any AIS American Indian Studies course 1-3
Except AIS101, AIS/HIS170 and AIS213/REL203
- ENH259 American Indian Literature 3
- GCU221 Arizona Geography 3
- HIS++++ Any HIS History course 3
Except AIS/HIS170
+ NAV++++ Any NAV Navajo course 1-3
- SPH245 Hispanic Heritage in the Southwest 3

Department Chairperson: Dr. A. Celoza
Program Director: Mr. R. McAllen-Walker
Contact: (602) 285-7759 and/or
roland.walker@pcmail.maricopa.edu

Chicana and Chicano Studies — Modified Academic Program
Academic Certificate — AC 6230 ☑️
12-13 Credits
The Academic Certificate (AC) in Chicana and Chicano Studies program explores the unique experiences of the Chicana and Chicano people living in the Southwest. The Certificate provides a study of Mexican-American life in the society of the United States, including Mexican background, social and cultural differences, and experiences of assimilation.

Program Notes:
Students must earn a grade of "C" or better for all courses within the program.
+ indicates course has prerequisites and/or corequisites

Admission Criteria: None

Program Prerequisites: 3-6 Credits
+ ENG101 First-Year Composition (3) OR
+ ENG107 First-Year Composition for ESL (3)
+ CRE101 College Critical Reading (3) OR

Equivalent as indicated by assessment

Required Courses: 9 Credits
+ CCS101 Chicano and Chicana Studies 3
- HIS109 Mexican American History and Culture 3
- SPH245 Hispanic Heritage in the Southwest 3

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Revised: 9/2/2011; 10/28/11; 12/7/11
Restricted Electives: 3-4 Credits

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<thead>
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<th>Credits</th>
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<td>ENH112</td>
<td>Chicano Literature</td>
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<td>HIS145</td>
<td>History of Mexico</td>
<td>3</td>
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<td>HUM213</td>
<td>Hispanic Film</td>
<td>3</td>
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<tr>
<td>SPA101</td>
<td>Elementary Spanish I</td>
<td>4</td>
</tr>
<tr>
<td>SPA102</td>
<td>Elementary Spanish II</td>
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<td>SPA103</td>
<td>Elementary Spanish for Spanish Speakers I</td>
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<td>SPA104</td>
<td>Elementary Spanish for Spanish Speakers II</td>
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<td>SPA201</td>
<td>Intermediate Spanish I</td>
<td>4</td>
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<tr>
<td>SPA202</td>
<td>Intermediate Spanish II</td>
<td>4</td>
</tr>
<tr>
<td>SPA203</td>
<td>Spanish for Spanish-Speaking Students I</td>
<td>4</td>
</tr>
<tr>
<td>SPA204</td>
<td>Spanish for Spanish-Speaking Students II</td>
<td>4</td>
</tr>
</tbody>
</table>

Department Chairperson: Dr. A. Celoza
Program Director: Dr. A. Celoza
Contact: (602) 285-7185 and/or albert.celoza@pcmail.maricopa.edu

International Studies — Modified Academic Program

Academic Certificate — AC 6213
12-13 Credits

The Academic Certificate (AC) in International Studies program will provide students the opportunity to broaden their horizons and their understanding of our increasingly interdependent global society. The Certificate approaches broad cultural issues and includes a strong emphasis on world politics and religions. It also includes developing proficiency in cross-cultural communications and the capacity to navigate world cultures. Proficiency in a modern language is also an integral part of the Certificate.

Program Notes:
+ indicates course has prerequisites and/or corequisites
++ indicates any module.
Students must earn a grade of "C" or better in all courses required within the program.
Study abroad credit may replace courses identified as electives with the approval of the Program Director or Department Chairperson.

Admission Criteria: None

Program Prerequisites: 3-6 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG101</td>
<td>First-Year Composition (3) OR</td>
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<td>ENG107</td>
<td>First-Year Composition for ESL (3)</td>
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<tr>
<td>CRE101</td>
<td>College Critical Reading (3) OR</td>
<td></td>
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<tr>
<td></td>
<td>Equivalent as indicated by assessment</td>
<td>0-3</td>
</tr>
</tbody>
</table>
Required Courses: 9 Credits
- REL243    World Religions    3
- POS120    World Politics    3
- POS140    Comparative Government (3) OR
- POS210    Political Ideologies (3)    3

Restricted Electives: 3-4 Credits
- ASB102    Introduction to Cultural and Social Anthropology    3
- HIS102    History of Western Civilization 1789 to Present    3
- SPH245    Hispanic Heritage in the Southwest    3

Any of the following Foreign Language courses:
- FRE+++    Any FRE/French course (101, 201) (4) OR
- ITA+++    Any ITA/Italian course (101, 201) (4) OR
- JPN+++    Any JPN/Japanese course (101, 201) (4) OR
- NAV+++    Any NAV/Navajo course (101, 201) (4) OR
- SPA+++    Any SPA/Spanish course (101, 201) (4)
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<th>IMPORTANT NUMBERS</th>
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<tr>
<td>Academic Advisement Center</td>
<td>(602) 285-7110</td>
</tr>
<tr>
<td>Admissions and Records</td>
<td>(602) 285-7777</td>
</tr>
<tr>
<td>Bookstore</td>
<td>(602) 285-7489</td>
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<tr>
<td>Counseling Center</td>
<td>(602) 285-7392</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>(602) 285-7410</td>
</tr>
<tr>
<td>Public Safety</td>
<td>(602) 285-7911</td>
</tr>
</tbody>
</table>

### About the Maricopa Community Colleges

We are the Maricopa Community Colleges. We are 10 colleges, 2 skill centers and numerous education centers, all dedicated to educational excellence and to meeting the needs of businesses and the citizens of Maricopa County. Each college is individually accredited, yet part of a larger system - the Maricopa County Community College District, which is one of the largest providers of higher education in the United States.

Whether you are just out of high school, beginning or re-entering college or seeking lifelong education, you'll find that the Maricopa Community Colleges offer a wide range of opportunities for you to create the educational future that's right for you. We offer approximately 1,000 occupational programs (degrees and certificates), and 37 academic associate degrees, and a total of 10,254 courses. We're the largest provider of health care workers and job training in Arizona, making us a major resource for business and industry and the place to be if you're seeking education and job training.

You can learn in the way that's best for you, because we have flexible course delivery, including field based, hybrid, in person, independent study, Internet, mixed media, print based, private instruction, evening, weekend and open-entry/open-exit choices.

If you see a four-year degree in your future, we have transfer agreements with public and private colleges and universities that enable seamless transitions to four-year institutions.

### Workforce Development (www.maricopa.edu/workforce)

The Center is a resource that connects and supports workforce development programs and available resources through the Maricopa Community Colleges to any business or organization, public or private, in the Greater Phoenix area. They are a central resource for the most current labor market information, as well as regional and national data on economic and workforce trends and issues. The Center serves as a hub, bringing together industry and education for discussions on curriculum and faculty training. Additionally, they can direct you to regional economic development entities that provide a wealth of information regarding both Arizona’s economy and its workforce.

### Demographics

**Students**

More than 260,000 students attend the Maricopa Community Colleges each year, taking credit and non-credit courses. Fall 2009 credit student demographics include:

- 55% women
- 34% non-Anglo (11% Other/Undeclared)
- 40% age 25 or older
- 72% part-time
- 41% intend to transfer
- 38% intend to gain or improve workforce skills
- 17% attend for personal interest
- 50% attend during the day
- 20% attend during the evening
- 25% are nontraditional
- 4% attend on the weekend

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs that were not available at the time of printing for the Phoenix College 2011-2012 Catalog, and/or relevant catalog information.

Revised: 9/2/2011; 10/28/11; 12/7/11
AGEC Course Offerings (Fall 2011)

SUN# Shared Unique Numbering (SUN) System

Based on the requirements of Senate Bill 1186, the Shared Unique Number (SUN) System was created to help students identify and enroll in courses that transfer as direct equivalents throughout the Arizona public community colleges and state universities.

Seventy-one Arizona General Education Curriculum (AGEC) and common major courses were selected for the first phase of the SUN System implementation. One requirement of the SUN System is to display the SUN course numbers in both online and printed course catalogs and class schedules. To meet this requirement, new course attributes were added with an effective term of Fall 2011.

The Phoenix College AGEC Course Offerings list included in the 2011/2012 Catalog and Handbook has been revised to reflect the new SUN Number beneath the Courses on the list. Additional information about the SUN System can be found at www.azsunsystem.com.

(November 17, 2010)

This list identifies the courses that meet Arizona General Education Competencies (AGEC) at Phoenix College for Fall 2011 only. There are additional courses that meet AGEC requirements, but these are Phoenix College's current offerings.

General education designations are subject to change. See the MCCCD Curriculum website for updates and complete information at:

http://aztransmac2.asu.edu/cgi-bin/WebObjects/agecweb.woa

Please note that General Education requirements for AAS and AGS degrees may vary. See the Phoenix College Catalog for degree and graduation information.

Transfer links are available at:

www.phoenixcollege.edu/transfer

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Revised: 9/2/2011; 10/28/11; 12/7/11
**Humanities and Fine Arts (HU)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>AIS213</td>
<td>American Indian Religions (L or HU, C)</td>
</tr>
<tr>
<td>AJ S123</td>
<td>Ethics and Administration of Justice</td>
</tr>
<tr>
<td>ARH100</td>
<td>Introduction to Art</td>
</tr>
<tr>
<td>ARH101</td>
<td>Prehistoric through Gothic Art (H)</td>
</tr>
<tr>
<td><strong>ART1101</strong></td>
<td>Renaissance through Contemporary Art (H)</td>
</tr>
<tr>
<td>ARH115</td>
<td>History of Photography</td>
</tr>
<tr>
<td>ARH118</td>
<td>Intro to Chinese Art (G)</td>
</tr>
<tr>
<td>ARH203</td>
<td>Art of Ancient Egypt (HU, H)</td>
</tr>
<tr>
<td>ARH217</td>
<td>Mexican Art History (H)</td>
</tr>
<tr>
<td>ASB222</td>
<td>Buried Cities &amp; Lost Tribes: Old World (SB or HU, G/H)</td>
</tr>
<tr>
<td>CCS101</td>
<td>Chicana &amp; Chicano Studies (C)</td>
</tr>
<tr>
<td>CNS101</td>
<td>Construction and Culture (G/H)</td>
</tr>
<tr>
<td>EDU291</td>
<td>Children’s Literature</td>
</tr>
<tr>
<td>EDU292</td>
<td>Art of Storytelling (HU, C)</td>
</tr>
<tr>
<td>ENH251</td>
<td>Mythology (G)</td>
</tr>
<tr>
<td>ENH254</td>
<td>Literature and Film (L or HU)</td>
</tr>
<tr>
<td>ENH280</td>
<td>Topics in American Literature (C)</td>
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<td>ENH291</td>
<td>Children’s Literature</td>
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<td>HCR210</td>
<td>Clinical Health Care Ethics</td>
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<td>HIS102</td>
<td>History of West Civ 1789 to Present (HU or SB, H/G)</td>
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<tr>
<td>HIS103</td>
<td>History U.S. to 1865 (HU or SB, H)</td>
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<tr>
<td>HIS108</td>
<td>U S History 1945 to present (H, SB)</td>
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<tr>
<td>HUM205</td>
<td>Introduction to Cinema</td>
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<tr>
<td>HUM209</td>
<td>Women &amp; Films (H/C)</td>
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<tr>
<td>HUM210</td>
<td>Contemporary Cinema</td>
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<tr>
<td>HUM250</td>
<td>Ideas &amp; Values in Hum (HU or L, H)</td>
</tr>
<tr>
<td>HUM292</td>
<td>The Art of Storytelling (HU,C)</td>
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<tr>
<td>INT115</td>
<td>Historical Architecture and Furniture (H)</td>
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<td>INT120</td>
<td>Twentieth Century Architecture and Furniture (H)</td>
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<td>MHL140</td>
<td>Survey of Music History (H)</td>
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<td>MHL143</td>
<td>Music in World Cultures (G)</td>
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<tr>
<td>MHL145</td>
<td>American Jazz and Popular Music (C)</td>
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<td>MHL146</td>
<td>Survey Broadway Musicals</td>
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<td>MHL153</td>
<td>Rock Music and Culture (H)</td>
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<td>PHI101</td>
<td>Intro to Philosophy</td>
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<td><strong>PHI1101</strong></td>
<td>Intro to Logic (L or HU)</td>
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<td>PHI103</td>
<td>Intro to Ethics (Honors)</td>
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<td><strong>PHI1103</strong></td>
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<td><strong>PHI1105</strong></td>
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<td>PHI213</td>
<td>Medical &amp; Bio-ethics</td>
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<td>PHI218</td>
<td>Philosophy of Sexuality</td>
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<td>PHI244</td>
<td>Philosophy of Religion</td>
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<tr>
<td>PHI251</td>
<td>Philosophy of Sport</td>
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<tr>
<td>REL203</td>
<td>American Indian Religions (L or HU, C)</td>
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<tr>
<td>REL205</td>
<td>Religion &amp; the Modern World (HU or L)</td>
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<tr>
<td>REL243</td>
<td>World Religions (G)</td>
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<tr>
<td>SPH245</td>
<td>Hispanic Heritage in the Southwest (C)</td>
</tr>
<tr>
<td>STO292</td>
<td>Art of Storytelling (HU,C)</td>
</tr>
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</table>

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Revised: 9/2/2011; 10/28/11; 12/7/11
Humanities and Fine Arts (HU) (continued)

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<td>THE111</td>
<td>Intro to Theatre</td>
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<td>THE205</td>
<td>Intro to Cinema</td>
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<tr>
<td>THE210</td>
<td>Contemporary Cinema</td>
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Literacy and Critical Inquiry (L)

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<td>AIS213</td>
<td>American Indian Religions (L or HU, C)</td>
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<tr>
<td>COM225</td>
<td>Public Speaking</td>
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<td>CRE101</td>
<td>College Critical Reading</td>
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<tr>
<td>ENG111</td>
<td>Technical/Professional Writing</td>
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<tr>
<td>ENG217</td>
<td>Personal and Exploratory Writing</td>
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<tr>
<td>ENH254</td>
<td>Literature and Film (L or HU)</td>
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<tr>
<td>GBS233</td>
<td>Business Communication</td>
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<tr>
<td>HUM250</td>
<td>Ideas and Values in Humanities (L or HU)</td>
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<tr>
<td>PHI103</td>
<td>Intro to Logic (L or HU)</td>
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<td>PSY290AC</td>
<td>Research Methods (L or SG)</td>
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<td>REL203</td>
<td>American Indian Religions (L or HU, C)</td>
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<tr>
<td>REL205</td>
<td>Religion and the Modern World (L or HU)</td>
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Social and Behavioral Sciences (SB)

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<td>Intro to Criminal Justice</td>
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<tr>
<td>AJS200</td>
<td>Current Issues in Criminal Justice</td>
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<tr>
<td>AJS225</td>
<td>Criminology</td>
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<tr>
<td>AJS270</td>
<td>Community Relations (C)</td>
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<tr>
<td>ASB102</td>
<td>Intro to Cultural and Social Anthropology (G)</td>
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<tr>
<td>ASB214</td>
<td>Magic, Witchcraft &amp; Healing (G)</td>
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<tr>
<td>ASB222</td>
<td>Buried Cities &amp; Lost Tribes: Old World (SB or HU, G/H)</td>
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<tr>
<td>ASB252</td>
<td>Anthropology of Sport (G)</td>
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<tr>
<td>ASM104</td>
<td>Bones, Stones and Human Evolution (SB or SG)</td>
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<td>ASM275</td>
<td>Intro to Forensic Anthropology</td>
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<td>CFS157</td>
<td>Marriage and Family Life</td>
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<td>CFS159</td>
<td>The Modern Family</td>
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<td>CFS176</td>
<td>Child Development</td>
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<td>COM100</td>
<td>Intro to Human Communication</td>
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<td>COM1100</td>
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<td>ECN211</td>
<td>Macroeconomic Principles</td>
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<td>Microeconomic Principles</td>
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<td>ECN2202</td>
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Revised: 9/2/2011; 10/28/11; 12/7/11
Social and Behavioral Sciences (SB) (continued)

HIS203  African-American History (C/H)
POS110  American National Government

POS1110  World Politics (G)

POS120  Political Ideologies (H)
POS270  American Legal System
POS285  Public Policy

PSY101  Intro to Psychology

PSY110  Psychology & Culture (C/G)
PSY240  Developmental Psychology
PSY266  Abnormal Psychology
PSY277  Psychology of Human Sexuality

SBU200  Society and Business (G)
SOC101  Intro to Sociology

SOC110  Racial and Ethnic Minorities (C)

SOC212  Gender and Society (C)
SOC251  Social Problems

SWU292  Effect Help/Diverse World (C)

WST161  American Women Since 1920 (C/H)

Natural Sciences – Quantitative (SQ) for AGEC-A and B

AST111/3  Intro to Solar System Astronomy
BIO100  Biology Concepts
BIO105  Environmental Biology
BIO108  Plants and Society
BIO156  Intro Biology for Allied Health

BIO181  General Biology (Majors) I

CHM107  Chemistry and Society and Lab (G)

CHM130  Fundamental Chemistry and Lab

CHM151  General Chemistry I and Lab

CHM152  General Chemistry II and Lab

CHM230  Fundamental Organic Chemistry

GLG101/3  Intro to Geology I and Lab (G)

GLG1101  Intro to Physical Geography

PHY101  Intro to Physics

PHY111  General Physics I

PHY121  University Physics I: Mechanics

PHY131  University Physics II: Electricity and Magnetism

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Revised: 9/2/2011; 10/28/11; 12/7/11
### Natural Sciences --General (SG) for AGEC-A and B

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ASM104</td>
<td>Bones, Stones and Human Evolution (SG or SB)</td>
</tr>
<tr>
<td>AST101/2</td>
<td>Survey of Astronomy</td>
</tr>
<tr>
<td>BIO109</td>
<td>Natural History of the Southwest</td>
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<tr>
<td>BIO145</td>
<td>Marine Biology</td>
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<tr>
<td>BIO160</td>
<td>Intro to Anatomy and Physiology</td>
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<td>BIO182</td>
<td>General Biology II</td>
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<td>BIO201</td>
<td>Human Anatomy and Physiology I</td>
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<td>BIO202</td>
<td>Human Anatomy and Physiology II</td>
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<tr>
<td>BIO205</td>
<td>Microbiology</td>
</tr>
<tr>
<td>FON241</td>
<td>Principles of Human Nutrition</td>
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<tr>
<td>PSY290AC</td>
<td>Research Methods (SG or L)</td>
</tr>
</tbody>
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### Computer/Statistics (CS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC110</td>
<td>Computer Usage and Applications</td>
</tr>
<tr>
<td>CIS105</td>
<td>Survey of Computer Information Systems</td>
</tr>
<tr>
<td>CIS159</td>
<td>Visual Basic Programming I</td>
</tr>
<tr>
<td>CIS162AD</td>
<td>C# Level I</td>
</tr>
<tr>
<td>GBS221</td>
<td>Business Statistics</td>
</tr>
<tr>
<td>MAT206</td>
<td>Elements of Statics</td>
</tr>
<tr>
<td>PSY230</td>
<td>Intro to Statistics</td>
</tr>
</tbody>
</table>

### Cultural Diversity in the U.S. (C)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS170</td>
<td>American Indian History of the Southwest (SB, C/H)</td>
</tr>
<tr>
<td>AIS213</td>
<td>American Indian Religions (L or HU, C)</td>
</tr>
<tr>
<td>AJ S270</td>
<td>Community Relations (SB, C)</td>
</tr>
<tr>
<td>CCS101</td>
<td>Chicana &amp; Chicano Studies (HU)</td>
</tr>
<tr>
<td>CPD160</td>
<td>Intro to Multiculturalism</td>
</tr>
<tr>
<td>EDU222</td>
<td>Intro to the Exceptional Learner (SB, C)</td>
</tr>
<tr>
<td>EDU230</td>
<td>Cultural Diversity in Education</td>
</tr>
<tr>
<td>EDU292</td>
<td>Art of Storytelling</td>
</tr>
<tr>
<td>ENH110</td>
<td>Intro to Literature (HU, C)</td>
</tr>
<tr>
<td>ENH280</td>
<td>Topics in American Literature</td>
</tr>
<tr>
<td>HCR230</td>
<td>Culture and Health (C/G)</td>
</tr>
<tr>
<td>HIS109</td>
<td>Mexican-American History and Culture (SB, C/H)</td>
</tr>
<tr>
<td>HIS170</td>
<td>American Indian History of the Southwest (SB, C/H)</td>
</tr>
<tr>
<td>HIS203</td>
<td>African-American History (SB, C/H)</td>
</tr>
<tr>
<td>HUM209</td>
<td>Women &amp; Films (HU, H/C)</td>
</tr>
<tr>
<td>HUM292</td>
<td>Art of Storytelling (HU,C)</td>
</tr>
<tr>
<td>MHL145</td>
<td>American Jazz and Popular Music (HU, C)</td>
</tr>
<tr>
<td>PSY132</td>
<td>Psychology &amp; Culture (SB, C/G)</td>
</tr>
<tr>
<td>REL203</td>
<td>American Indian Religions (L or HU, C)</td>
</tr>
<tr>
<td>SOC140</td>
<td>Racial and Ethnic Minorities (SB, C)</td>
</tr>
</tbody>
</table>

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Revised: 9/2/2011; 10/28/11; 12/7/11
**Cultural Diversity in the U.S. (C) (continued)**

STO292   Art of Storytelling (HU, C)
SWU292   Effect Help/Diverse World (SB)
WST161   American Women Since 1920 (SB, C/H)

**Global Awareness (G)**

ARH118   Intro to Chinese Art (HU, G)
ASB102   Intro to Cultural and Social Anthropology (SB, G)
ASB222   Buried Cities & Lost Tribes: Old World (HU or SB, G/H)
ASB252   Anthropology of Sport (SB)
CHM107   Chemistry and Society & Lab (SQ, G)
CNS101   Construction and Culture (G/H)
ENH251   Mythology (HU, G)
GLG101   Intro to Geology I & Lab (SQ, G)

**SUN** GLG1101

HCR230   Culture and Health (C,G)
HIS102   Hist West Civ 1789 to Present (SB or HU, H/G)
IBS101   Intro to International Business
MHL143   Music in World Cultures (HU, G)
POS120   World Politics (SB)

**SUN** POS1120

PSY132   Psychology & Culture (SB, C/G)
REL243   World Religions (HU, G/H)
SBU200   Society and Business (SB, G)
SPA201   Intermediate Spanish I

**SUN** SPA2201

SPA202   Intermediate Spanish II

**SUN** SPA2202

SPA203   Spanish for Spanish-Speaking Students I

**Historical Awareness (H)**

AIS170   American Indian History of the Southwest (SB, C/H)
ARH101   Prehistoric through Gothic Art (HU, H)

**SUN** ART1101

ARH102   Renaissance through Contemporary Art (HU)

**SUN** ART1102

ARH203   Art Ancient Egypt (HU, H)
ARH217   Mexican Art History (HU, H)
ASB222   Buried Cities & Lost Tribes: Old World (HU or SB, H)
CNS101   Construction and Culture (HU,G/H)
HCR220   Health Care Organizations
HIS100   History of Western Civilization to Middle Ages (SB, H)
HIS102   History of West. Civilization 1789-Present (HU or SB, H/G)
HIS103   United States History to 1865 (HU or SB, H)
HIS104   United States History to 1865 to Present (SB, H)
HIS105   Arizona History (SB,H)
HIS108   U. S. History 1945 to Present (SB, H)
HIS109   Mexican Amer Hist & Cult (SB, C/H)
HIS170   American Indian History of the Southwest (SB, C/H)
HIS203   African-American History (SB, C/H)
HUM108   Contemporary Humanities (G, HU)

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Revised: 9/2/2011; 10/28/11; 12/7/11
### Historical Awareness (H) (continued)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HUM 209</td>
<td>Women &amp; Films (HU, H/C)</td>
</tr>
<tr>
<td>HUM 250</td>
<td>Ideas &amp; Values in Hum (HU or L, H)</td>
</tr>
<tr>
<td>INT 115</td>
<td>Historical Architecture and Furniture (HU, H)</td>
</tr>
<tr>
<td>INT 120</td>
<td>Twentieth Century Architecture and Furniture (HU, H)</td>
</tr>
<tr>
<td>MHL 140</td>
<td>Survey of Music History (HU, H)</td>
</tr>
<tr>
<td>MHL 153</td>
<td>Rock Music and Culture (HU, H)</td>
</tr>
<tr>
<td>SWU 102</td>
<td>Intro to Social Work (SB, H)</td>
</tr>
<tr>
<td>WST 161</td>
<td>American Women Since 1920 (SB, (C/H)</td>
</tr>
</tbody>
</table>

Qualified students may earn Honors credit. Please check with the Honors Office (Room B-263), or call 602-285-7305.
AAA – Advancing Academic Achievement

AAA/CPD115
Creating College Success
1 credit(s) 1 period(s) lecture
Strategies to create success in college. Methods for selecting and developing effective academic strategies, increasing self-awareness and developing self-management strategies. Elements of college resources and relationships with others explored in support of students’ educational experience. **Prerequisites:** None.

AAA/CPD150
Strategies for College Success
3 credit(s) 3 period(s) lecture
Focus on increasing student success through college orientation and personal growth, study skills development, and educational and career planning. **Prerequisites:** None.

AAA/CPD150AA
College Orientation/Personal Growth
1 credit(s) 1 period(s) lecture
Emphasis on increasing student success through college orientation, identification of learning style and the use of time management, goal-setting, and interpersonal communication strategies. **Prerequisites:** None.

AAA/CPD150AB
Study Skills Development
1 credit(s) 1 period(s) lecture
Emphasis on increasing student success through the use of study strategies including materials organization, note-taking, reading, test-taking, memory and critical and creative thinking. **Prerequisites:** None.

AAA/CPD150AC
Educational and Career Planning
1 credit(s) 1 period(s) lecture
Emphasis on increasing student success through educational and career planning. **Prerequisites:** None.

ACC – Accounting

ACC105
Payroll, Sales and Property Taxes
3 credit(s) 3 period(s) lecture
Tax reporting for payroll, sales, and personal property. **Prerequisites:** None.

ACC111
Accounting Principles I
3 credit(s) 3 period(s) lecture
Fundamental theory of accounting principles and procedures. **Prerequisites:** None.

ACC112
Accounting Principles II
3 credit(s) 3 period(s) lecture
Continuation of the fundamental theory of accounting principles and procedures, including interpretation of general purpose financial statements. **Prerequisites:** ACC111 with a grade of “C” or better, or permission of department/division.

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ACC115
Computerized Accounting
2 credit(s) 3 period(s) lecture + lab
Mastery of a microcomputer accounting system including the general ledger, accounts receivable, accounts payable and payroll. Prerequisites: ACC107 or higher level accounting course, or permission of instructor.

ACC121
Income Tax Preparation
3 credit(s) 3 period(s) lecture + lab
Preparation of and practical experience in preparing individual federal income tax returns using computer software. Prerequisites: None.

ACC211
Financial Accounting
3 credit(s) 3 period(s) lecture
Introduction to theory and practice in the preparation and interpretation of general purpose financial statements. Prerequisites: None.

ACC212
Managerial Accounting
3 credit(s) 3 period(s) lecture
Development and analysis of accounting information for managerial planning and control. Prerequisites: A grade of "C" or better in (ACC111 and ACC112), or ACC211, and (CIS105 or permission of department/division).

ACC215
Governmental and Not-For-Profit Accounting
3 credit(s) 3 period(s) lecture
Theories and procedures of accounting for governmental and not-for-profit organizations. Prerequisites: A grade of "C" or better in ACC112 or ACC211, or permission of Department/Division.

ACC219
Intermediate Accounting I
3 credit(s) 3 period(s) lecture
Theory and practice applicable to determination of asset values, liabilities, and related problems of income determination. Prerequisites: ACC212 or ACC240 with a grade of "C" or better, or permission of department/division.

ACC220
Intermediate Accounting II
3 credit(s) 3 period(s) lecture
Continuation of the theory and practice applicable to liabilities and owner's equity; special problems and financial reporting. Prerequisites: ACC219 with a grade of "C" or better, or permission of department/division.

ACC221
Tax Accounting
3 credit(s) 3 period(s) lecture
Preparation of and accounting procedures for individuals; introduction to partnerships and corporate tax structures. Prerequisites: ACC111 or ACC211 or permission of department/division.

ACC230
Uses of Accounting Information I
3 credit(s) 3 period(s) lecture
Introduction to the uses of accounting information for internal and external purposes with emphasis on financial statement analysis. Prerequisites: Grade of "C" or better in ACC111 or ACC211, or a grade of "C" or better in (ENG101 and MAT151 and CRE101), or equivalent, or satisfactory score on District placement exam.

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ACC240
Uses of Accounting Information II
3 credit(s) 3 period(s) lecture
Introduction to the uses of accounting information for internal and external purposes with emphasis on analysis for use by management. Prerequisites: ACC230.

ACC270AA-AC
Accounting Internship
1-3 credit(s) 1-3 period(s) lab
Accounting work experience in a business or industry. Eighty hours of designated work per credit per semester. Maximum of 3 credits allowed. Prerequisites: Departmental approval.

ACC298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

ADA – Advertising Arts

ADA113
Air Brush Techniques
3 credit(s) 5 period(s) lecture + lab
Use of the artist’s air brush in illustration, photo retouching, vignetting, silhouetting, emphasizing. Photo retouching for reproduction purposes and technical illustration. Prerequisites: None.

ADA114
Graphics Printing Processes
3 credit(s) 4 period(s) lecture + lab
Printing methods, skill development in planning and layout, composition methods, proofing and correction, color process, image carrier preparation. Prerequisites: None.

ADA/ART180
Designer’s Tools (Modules)
1 credit(s) 2 period(s) lecture + lab
Introduction to the multiple elements of a selected visual art software package using the microcomputer. Basic foundation in the use of electronic techniques including appropriate input and output production devices. Prerequisites or Corequisites: ART100, or permission of instructor.

ADA/ART180AB
Designer’s Tools: Page Maker

ADA/ART180AC
Designer’s Tools: Quark Express

ADA/ART180AD
Designer’s Tools: Adobe Illustrator

ADA/ART180AE
Designer’s Tools: Adobe Photoshop

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AES – Aerospace Studies

AES101
Air Force Today I
2 credit(s) 2 period(s) lecture & lab
Introduction to U.S. Air Force and AFROTC. Topics include: the Air Force mission and organization, customs and courtesies, officer opportunities, officership and professionalism. Prerequisites: None.

AES103
Air Force Today II
2 credit(s) 2 period(s) lecture & lab
Introduction to U.S. Air Force and AFROTC. Topics include: the Air Force mission and organization, customs and courtesies, officer opportunities, officership, and professionalism. Prerequisites: None.

AES201
Evolution of USAF Air and Space Power I
2 credit(s) 2 period(s) lecture & lab
Further preparation of AFROTC candidate. Topics include: Air Force heritage and leaders, communication skills, ethics, leadership, quality Air Force, and values. Prerequisites: None.

AES203
Evolution of USAF Air and Space Power II
2 credit(s) 2 period(s) lecture & lab
Topics include: The Air Force mission and organization, customs and courtesies, officer opportunities, officership, and professionalism. Prerequisites: None.

AES294
Air Force Physical Fitness
1 credit(s) 3 period(s) lecture + lab
Beginning instruction in adapted physical activities and a variety of sports and sports activities to include calisthenics, sit-ups, push-ups, running, basketball, volleyball, and other physical events. Prerequisites: None. Course Note: AES294 may be repeated for credit.

AFR – African American Studies

AFR110
Introduction to African-American Studies
3 credit(s) 3 period(s) lecture
Introduction to the study of the African-American experience. Interdisciplinary approach includes historical underpinnings; population and cultural characteristics; social, economic, and political issues; and implications for the future. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
AFR/ASB202
Ethnic Relations in the United States
3 credit(s) 3 period(s) lecture
Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. **Prerequisites:** None.

AFR203
African-American History: The Slavery Experience
3 credit(s) 3 period(s) lecture
History and cultural heritage of African-Americans, including arrival in the Americas, chattel slavery experience, emancipation, and participation in the American Civil War. Presented from an Afro-centric perspective. **Prerequisites:** AFR110 or permission of instructor.

AFR204
African-American History: Reconstruction to the Present
3 credit(s) 3 period(s) lecture
History and cultural heritage of African-Americans from the Reconstruction period to the present, including the Depression, the Harlem Renaissance, the Civil Rights Movement, and affirmative action. Presented from an Afro-centric perspective. **Prerequisites:** AFR203, or permission of instructor.

AHU – Arabic Humanities

AHU245
Arabic Culture and Islam
3 credit(s) 3 period(s) lecture
A survey of Arab heritage in the Arab world (Middle East). Cultural and social institutions and their contribution to the development of the region and its heritage. **Prerequisites:** None.

AIS – American Indian Studies

AIS101
Survey of American Indian Issues
3 credit(s) 3 period(s) lecture
Introduction to critical issues related to Native Americans. Examines political, economic, and social issues. Focuses on contemporary issues and factors influencing American Indian communities. **Prerequisites:** None.

AIS110
Navajo Government
3 credit(s) 3 period(s) lecture
Addresses and examines major historical developments of the Navajo People with a focus on government, law, society, livelihood, tradition, and culture. Includes the major components and operation of Navajo government and related tribal laws, such as Title II and Title VII of the Navajo Nation Code, as well as the significance of the Treaty of 1868. Federal Indian policies and their impact on Navajo society and government, the importance of federal and tribal citizenship and related federal and tribal laws, and the role of the Navajo clanship system and other relevant cultural concepts addressed. **Prerequisites:** None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
AIS/SOC112
American Indian Policy
3 credit(s) 3 period(s) lecture
Reviews United States government policies and their impact on American Indian sovereignty. Examines historic, legal, economic, and social issues regarding Indian policies and how they impact Indian Nations and individual Indians. Studies historical as well as contemporary policies created by the Federal Government that define the trust relationship between the United States government and Indian Nations. **Prerequisites:** None.

AIS/SOC141
Sovereign Indian Nations
3 credit(s) 3 period(s) lecture
Explores the sovereign status of American Indians as it relates to social relationships, traditions and culture of American Indians. Reviews historic relations with non-Indian societies, the development of federal Indian law, tribal government, other current issues, and contemporary social problems. **Prerequisites:** None.

AIS/SOC160
American Indian Law
3 credit(s) 3 period(s) lecture
Analyzes the legal system of the United States Government as it applies to American Indian Nations. Examines how United States legal institutions have impacted Indian sovereignty. Units of analysis include the development of Indian law, United States Supreme Court decisions, Congressional Acts, treaty rights and the development of tribal governments. Focuses on legal institutions that have abridged the property rights of Indian Nations. **Prerequisites:** None.

AIS/HIS170
American Indian History of the Southwest
3 credit(s) 3 period(s) lecture
Covers history of Indian peoples in the southwestern United States from pre-Columbian era to the present. Includes historical events, the development and implementation of Spanish-Mexican and United States' policies and their impact on Indian peoples in these areas, and current issues of importance to Indian peoples. **Prerequisites:** None.

AIS213/REL203
American Indian Religions
3 credit(s) 3 period(s) lecture
Tribal traditions of the peoples native to North American, and pan-Indian religions in the twentieth century. **Prerequisites:** ENG101 or ENG107 or equivalent.

AIS/ENH/WST261
Native Women's Literature:
The Americas
3 credit(s) 3 period(s) lecture
Explores contemporary native women's (indigenous to the Americas) literature. Selected literature (oral tradition, poetry, fiction, nonfiction, and drama) focuses on themes relevant to native women. Examines the trends and movements within American Indian and women's literary history. **Prerequisites:** ENG101.

AIS/ENH262
Navajo Literature: Words and Stories
3 credit(s) 3 period(s) lecture
Explores the works of Navajo writers in American Indian literature, including selected writers of the Southwest. Samples oral tradition, chants/songs, poetry, fiction, and nonfiction, and their relationship to American Indian literature. Focuses on major themes relevant to understanding ideologies, trends, and movements within Navajo history and literature. **Prerequisites:** ENG101.

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AIS298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

AJS – Administration of Justice Studies

AJ S101
Introduction to Criminal Justice
3 credit(s) 3 period(s) lecture
An introduction to crime and society’s responses to it. Examines the nature and causes of crime, the criminal law, constitutional safeguards, and the organization and operation of the criminal justice system including the police, courts, jails, prisons, probation and parole departments, and community corrections agencies. Covers the history of the criminal justice system, terminology and career opportunities. Prerequisites: None.

AJ S107
Patrol Procedures
3 credit(s) 3 period(s) lecture
Specialized areas of the patrol function, including responding to crowds, riots, bomb threats, intoxication, hazardous materials, fires, and domestic disputes. Partially fulfills Arizona POST requirements for proficiency skills academy attendance. Prerequisites: None.

AJ S109
Substantive Criminal Law
3 credit(s) 3 period(s) lecture
Covers philosophy of legal sanctions and historical development from the common law to modern American criminal law, classifications of crimes, elements of and parties to crimes, general definitions of crime, common defenses utilized. Includes specific offenses and the essential elements of each offense. Required in AJS curriculum. Prerequisites: None.

AJ S110
Law and Legal Review I
3 credit(s) 3 period(s) lecture
In-depth study of the Arizona laws governing arrest by peace officers, as well as an intensive study of the Arizona substantive criminal law code (ARS Title 13). Focuses on specific sections of ARS Title 4 and ARS Title 8, as they apply to peace officers in Arizona. Partially fulfills the Arizona POST Board requirements for Proficiency Skills Academy attendance. Prerequisites: None.

AJ S123
Ethics and the Administration of Justice
3 credit(s) 3 period(s) lecture
Introduces and explores ethical issues and the justice system. Focuses on ethics and the law, the police, courts and corrections. Reviews ethical theory, concepts and practices as they relate to administration of justice. Encourages critical thinking and value decision making in criminal justice system situations. Prerequisites: None.

AJ S124
Correctional Institutions
3 credit(s) 3 period(s) lecture
An examination of correctional institutions with an emphasis on personnel and security measures, care and treatment programs and institutional planning. The criminal justice system and matters of custody and treatment. Inmate subcultures, and organized crime in correctional institutions and jails. Prerequisites: None.

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AJ S128
Law and Violence Against Women
3 credit(s) 3 period(s) lecture
Covers cases and materials on systems of oppression particularly as related to women in our society. Areas covered include battering, sexual harassment, sexual assault, prostitution, and pornography as exemplified in present-day society. Designed to give students the ability to identify problems of violence against women and participate in current societal discourse on various ways to resolve them. Prerequisites: None.

AJ S131
Police Management Techniques I
3 credit(s) 3 period(s) lecture
Police supervisory techniques for planning, organization coordination, reporting, budgeting and handling related personnel problems. Prerequisites: None.

AJ S150
Defensive Tactics
1 credit(s) 1 period(s) lecture
Skills in the protection against persons armed with dangerous and deadly weapons, demonstration and drill in a limited number of holds and come-alongs, and restraint of prisoners and the mentally ill. May be repeated twice for credit. Prerequisites: None.

AJ S198AB
Special Topics in the Administration of Justice
1 credit(s) 1 period(s) lecture
Explores special topics related to the administration of justice with an emphasis on current issues. Prerequisites: None. Course Note: AJ S198AB may be repeated for a total of nine (9) credit hours.

AJ S200
Current Issues in Criminal Justice
3 credit(s) 3 period(s) lecture
Examines current issues, techniques, and trends in the Criminal Justice System. Prerequisites: None.

AJ S201
Rules of Evidence
3 credit(s) 3 period(s) lecture
A practical insight into the rules of evidence to include how to recognize evidence: the general rules governing admissibility of evidence; the “hearsay” rule and its exceptions; the use of documentary evidence, written memoranda, photographs, and recordings; corpus delicti; opinion evidence, circumstantial evidence, evidential privileges. Required in AJ S curriculum. Prerequisites: None.

AJ S205
Criminal Justice Report Writing
3 credit(s) 3 period(s) lecture
Characteristics of reports and field notes, and the importance and uses of each. Form, style, and procedures for writing various reports, including elements of composition, required substance, proper and improper conclusions, and descriptions of persons and property. Prerequisites: None.

AJ S210
Constitutional Law
3 credit(s) 3 period(s) lecture
An examination of the U. S. Constitution as it relates to the law enforcement function. Includes statutory law and judicial decisions governing the areas of arrest, search and seizure, interrogations and confessions, self-incrimination and other constitutional guarantees. Required in AJ S curriculum. Prerequisites: None.

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AJ S212
Juvenile Justice Procedures
3 credit(s) 3 period(s) lecture
Examines the history and development of juvenile justice theories, procedures, and institutions. Prerequisites: None.

AJ S213
Evidence Technology/Fingerprints
3 credit(s) 3 period(s) lecture
Fingerprint identification, interpretation, and classification. The fundamentals of fingerprinting and the problems in developing latent prints, preservation of evidence and the chain of evidence. Prerequisites: None.

AJ S214
Evidence Technology/Photography
3 credit(s) 3 period(s) lecture
The use of photography and other aids in identification and preservation of evidence such as fingerprints, footprints and impressions. Techniques in crime scene and traffic accident photography. Prerequisites: None.

AJ S215
Criminalistics: Physical Evidence
3 credit(s) 3 period(s) lecture
The scientific analysis and examination of physical evidence with emphasis on scientific investigation, recognition, collection, and preservation of evidence. Discussion topics include fingerprints, shoe prints, tool marks, firearms identification, paint chips and arson. Prerequisites: None.

AJ S216
Criminalistics: Biological Evidence
3 credit(s) 3 period(s) lecture
The scientific analysis and examination of biological evidence with emphasis on collection and preservation of evidence. Topics discussed include blood, drugs, blood alcohol, hairs and fibers, and topics of special interest in criminalistics. Prerequisites: None.

AJ S225
Criminology
3 credit(s) 3 period(s) lecture
Study of deviance, society’s role in defining behavior; theories of criminality and the economic, social, and psychological impact of crime; relationships between statistics and crime trends. Examines crime victimization and the various types of crimes and categories of offenders. Required in the AJ S curriculum. Prerequisites: None.

AJ S230
The Police Function
3 credit(s) 3 period(s) lecture
Theories of procedures and methods of operations of public police with emphasis on discretionary powers available to the working police officer. Career opportunities and current trends in law enforcement presented. Prerequisites: None.

AJ S240
The Correction Function
3 credit(s) 3 period(s) lecture
Examines the history and development of correctional theories and institutions. Prerequisites: None.

AJ S241
Police Photography
3 credit(s) 3 period(s) lecture
Emphasis on proper procedure for photographing crime scenes, accident scenes, and laboratory specimens. Discussion of photographic techniques, equipment, lighting techniques, aerial photography, video and motion pictures, macro and micro photography, filters, and preparation for court presentation using selected simulations. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
AJS242
Crime Scene Processing
3 credit(s) 3 period(s) lecture
Procedures and technology required to process crime scenes including how to protect a crime scene, collect information, search for, collect, and preserve physical and biological evidence, and conduct field tests. Practical experience in evidence collection and crime scene sketching and processing. Prerequisites: AJS213 and (AJS214 or AJS241) or permission of instructor.

AJS260
Procedural Criminal Law
3 credit(s) 3 period(s) lecture
Concerned with the understanding of procedural criminal law. Examines the rationale underlying major court holdings, the procedural requirements that stem from these holdings, and their effect on the daily operations of the criminal justice system. Prerequisites: None.

AJS270
Community Relations
3 credit(s) 3 period(s) lecture
Examination, recognition and understanding of community problems; community action programs; methods of coping with human behavior, victimology, conflict, and communication; ethnic and minority cultures and environments; the community and relationships with the criminal justice system. Prerequisites: None.

AJS271
Special Populations I
1 credit(s) 1 period(s) lecture
Recognition of non-psychotic and psychotic behaviors including personality disorders, substance abuse, and suicidal ideas. Recommended ways of dealing with these people and identification of appropriate community agencies that can provide assistance. Prerequisites: None.

AJS275
Criminal Investigation I
3 credit(s) 3 period(s) lecture
Introduction to the theory of criminal investigation. Examines crime scene procedures, case preparation, interviewing, and basic investigative techniques. Prerequisites: None.

AJS276
Criminal Investigation II
3 credit(s) 3 period(s) lecture
Focuses on investigating specific offenses, methods for identifying, collecting and preserving evidence. Establishing elements of crimes and connecting suspects to the crimes. Prerequisites: AJS275.

AJS289A
Street Gangs I
1 credit(s) 1 period(s) lecture
Introduction to street gang identification, history, culture, and current trends, specifically in the western United States. Prerequisites: Certified officer or permission of instructor.

AJS290 Courses
Course topics presented are selected from a variety of subjects designed to meet the needs and interests of persons desiring in-service education and training. AJS290 courses may be repeated for credit provided it is not a repeat of the same topic. Courses may not transfer to other colleges and universities.

AJS290AU
Child Abuse Investigation
1 credit(s) 1 period(s) lecture
Definition and investigation of the causes and effects of child abuse. Prerequisites: None.

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AJ S290BL
White Collar Crimes
1 credit(s) 1 period(s) lecture
Business-related criminal activities, including computer fraud, pyramid schemes and false and misleading advertising and security schemes. Prerequisites: None.

AJ S290BN
Courtroom Testimony Seminar
1 credit(s) 1 period(s) lecture
Courtroom demeanor and protocol. Role and primary functions of witness and legal counsels. Prerequisites: None.

AJ S290BO
Alcohol Abuse Seminar
1 credit(s) 1 period(s) lecture
Physiological and psychological effects of alcohol and symptoms of alcohol abuse. Emphasis on the detection and treatment of the alcoholic. Prerequisites: None.

AJ S290BU
Family Violence
1 credit(s) 1 period(s) lecture
Family violence issues as they relate to the criminal justice response. Prerequisites: None.

AJ S290BV
Victim Assistance
1 credit(s) 1 period(s) lecture
An overview of victim issues emphasizing strategies used to reduce the trauma associated with crime. Includes description of counseling methods, referral procedures, intervention techniques, and community resources. Prerequisites: None.

ARB – Arabic

ARB101
Elementary Arabic I
4 credit(s) 5 period(s) lecture + lab
Introduction to the basic alphabet, grammar, pronunciation and vocabulary of the Arabic language. Listening, speaking, reading and writing skills. Prerequisites: None.

ARB102
Elementary Arabic II
4 credit(s) 5 period(s) lecture + lab
A continuation of ARB101. Continued study of grammar and vocabulary, with emphasis on pronunciation and speaking skills. Prerequisites: ARB101 or equivalent.

ARC – Architecture

ARC225
Fundamentals of Architectural Detailing
3 credit(s) 3 period(s) lecture
Introduction to construction/architecture detailing. Examines functional, construction-related, and aesthetic applications of detailing. Prerequisites: CNS130, or CNS180, or permission of Department or Division.

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ARH – Art Humanities

ARH100
Introduction to Art
3 credit(s) 3 period(s) lecture
Understanding and enjoyment of art through study of painting, sculpture, architecture, design, photography, and decorative arts. Emphasis on contemporary topics and cultural diversity in the arts. **Prerequisites:** None.

ARH101 / ART1101
Prehistoric Through Gothic Art
3 credit(s) 3 period(s) lecture
History of art from prehistoric through medieval period. **Prerequisites:** None.

ARH102 / ART1102
Renaissance Through Contemporary Art
3 credit(s) 3 period(s) lecture
History of art from around the world from the Renaissance through contemporary period. **Prerequisites:** None.

ARH109
History of American Art
3 credit(s) 3 period(s) lecture
Development and variety of American art. Presentation of architecture, sculpture, painting and decorative objects. **Prerequisites:** None.

ARH112
History of Modern Art
3 credit(s) 3 period(s) lecture
Development and significant aspects of modern art, including comparisons of relationships in expressionism, abstractions, fantasy, and art since mid-century. **Prerequisites:** None.

ARH115
History of Photography
3 credit(s) 3 period(s) lecture
Survey of history of photography from beginning to present. Emphasizes medium’s impact upon society and other visual arts. Technical developments, aesthetic concerns, and individual photographers studied. **Prerequisites:** None.

ARH118
Introduction to Chinese Art
3 credit(s) 3 period(s) lecture + lab
Explores Chinese philosophy, symbolism, history and religions that underlie the choice of subject matter and life forms in Chinese art. Uses Chinese bamboo brush, ink and rice paper to study Chinese calligraphy and traditional subjects for painting. **Prerequisites:** None.

ARH145
History of American Indian Art
3 credit(s) 3 period(s) lecture
Survey of American Indian Art from precontact to present. Reviews the impact of these art forms on contemporary American society, other world societies and on the visual arts. Explores characteristics, cultural influences and concerns represented in various art forms past and present. Features field trips to galleries and collections. **Prerequisites:** None.

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ART/ADA115
Three-Dimensional Design
3 credit(s) 6 period(s) lecture + lab
Fundamental principles of three-dimensional design. Prerequisites: ART12.

ART116
Life Drawing I
3 credit(s) 6 period(s) lecture + lab
Use of form, structure and anatomy of draped and undraped human figure to develop basic principles of sound draftsmanship. Prerequisites: None.

ART117
Life Drawing II
3 credit(s) 6 period(s) lecture + lab
Further study of form, structure, and anatomy of the draped and undraped human figure with emphasis on composition. Prerequisites: ART116.

ART122
Drawing and Composition II
3 credit(s) 6 period(s) lecture + lab
Emphasis on composition and exploration of drawing media. Prerequisites: ART111.

ART150
Digital Storytelling
3 credit(s) 6 period(s) lecture + lab
Enables students to find and develop their personal stories. Emphasis on the use of digital technology to create, edit, produce and archive a digital story. Prerequisites: None.

ART151
Sculpture I
3 credit(s) 6 period(s) lecture + lab
Exploration of sculptural form and expression in clay, plaster, stone, wood and metal. Prerequisites or Corequisites: ART115 or permission of instructor.

ART152
Sculpture II
3 credit(s) 6 period(s) lecture + lab
Continuation of ART151 with emphasis on control of sculptural media. Prerequisites: ART151.

ART161
Ceramics I
3 credit(s) 6 period(s) lecture + lab
Introduction to ceramic materials and techniques of hand construction, decorating, glazing and throwing on potters' wheel. Prerequisites: None.

ART162
Ceramics II
3 credit(s) 6 period(s) lecture + lab
Major emphasis on wheel throwing, glaze making and decorating techniques. Prerequisites: ART161.

ART165
Watercolor Painting I
3 credit(s) 6 period(s) lecture + lab
Transparent and Gouache watercolor painting. Prerequisites: ART111 and ART112 or permission of instructor.

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ART166
Watercolor Painting II
3 credit(s) 6 period(s) lecture + lab
Painting in water soluble media. Emphasis on individual techniques and design. Prerequisites: ART165.

ART167
Painting I
3 credit(s) 6 period(s) lecture + lab
Exploration of technical and expressive possibilities of various painting media in easel painting. Prerequisites: ART111 and ART112 or permission of instructor.

ART168
Painting II
3 credit(s) 6 period(s) lecture + lab
Continued refinement of painting skills and investigation of new possibilities in painting. Prerequisites: ART167 or permission of instructor.

ART/ADA169
Two-Dimensional Computer Design
3 credit(s) 6 period(s) lecture + lab
Generation of electronic two-dimensional images and traditional methods of visual problem solving. Understanding of computer techniques and art presentation methods. Prerequisites or Corequisites: ART100 or permission of instructor.

ART/ADA170
Three-Dimensional Computer Design
3 credit(s) 6 period(s) lecture + lab
Artistic manipulation of computer images. Emphasis on color and three-dimensional design in production of these images. Existing software used to generate three-dimensional art. Prerequisites: ART100, ART169, or permission of instructor.

ART/ADA173
Computer Art
3 credit(s) 6 period(s) lecture + lab
Introduction to the multiple elements of paint software programs using the microcomputer. Basic foundation in the use of computer techniques including color paint programs for the production of computer images. Use of electronic input and output devices. Prerequisites: ART100, or permission of instructor.

ART/ADA175
Electronic Publishing Design I
3 credit(s) 6 period(s) lecture + lab
Introduction to the multiple elements of commercial publishing using the microcomputer. Basic foundation in the use of electronic page layout techniques. Emphasis on publication design layout and concepts. Prerequisites or Corequisites: ART100 or permission of instructor.

ART/ADA177
Computer-Photographic Imaging
3 credit(s) 6 period(s) lecture + lab
Introduction to the multiple elements of microcomputer-photographic imaging. Basic foundation in the use of the photographic manipulation of images using software programs. Special attention to aesthetic foundations underlying photographic composition. Prerequisites or Corequisites: ART100 or permission of instructor.

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ART179
Electronic Presentation Design
3 credit(s) 6 period(s) lecture + lab
Introduction to the multiple elements of commercial-graphic presentation materials using the microcomputer and other advanced technologies. Basic foundation in the use of computer presentation software programs using presentation techniques. Special attention to aesthetic foundations underlying all presentation materials. Prerequisites or Corequisites: ART100 or permission of instructor.

ART/ADA180
Designer's Tools Modules
1 credit(s) 2 period(s) lecture + lab
Introduction to the multiple elements of a selected visual art software package using the microcomputer. Basic foundation in the use of electronic techniques including appropriate input and output production devices. Prerequisites: ART100, or permission of instructor.

ART/ADA180AB
Designer's Tools: Page Maker

ART/ADA180AC
Designer's Tools: QuarkExpress

ART/ADA180AD
Designer's Tools: Adobe Illustrator

ART/ADA180AE
Designer's Tools: Adobe Photoshop

ART/ADA180AF
Designer's Tools: Paint Software

ART/ADA180AG
Designer's Tools: Animation Works

ART/ADA180AH
Designer's Tools: Aldus Freehand

ART180AI
Designer's Tools: 3-D Studio Textures

ART180AJ
Designer's Tools: 3-D Special Effects

ART180AK
Designer's Tools: Adobe Premiere

ART180AL
Designer Tools: Character Studio

ART181
Graphic Design I
3 credit(s) 6 period(s) lecture + lab
Introduction to development of lettering and design skills through functional and aesthetic use of typography. Concentration on lettering for reproduction, type indication, historical development, type specification, and use of letter forms as design elements. Prerequisites: ART112 or permission of instructor.

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ART182
Graphic Design II
3 credit(s) 6 period(s) lecture + lab
Concept development and design solutions to problems in consumer advertising, sales promotion and public relations material. Interpreting art form and copy through creative graphic solutions. Pasteup and production processes. Prerequisites: ART181 or permission of instructor.

ART/ADA183
Computer Aided Graphic Arts I
3 credit(s) 6 period(s) lecture + lab
Graphic design use in microcomputer; black and white graphics, standard and color brushes, lines, shapes, area fills and fonts. Application to illustration, advertising graphics, typography and video interaction. Prerequisites or Corequisites: ART100 or permission of instructor.

ART/ADA/MMT184
Computer Animation
3 credit(s) 6 period(s) lecture + lab
The art of animation (animated sequences, special effects, titles, etc.) using the computer. Construction characters, background graphics, color, scaling, storyboard, cells, timing, editing, and surface rendering. Screening and discussion of selected animated short films and videos. Prerequisites: ART100, or ART111, or ART116, or permission of instructor.

ART/MMT185
3-D Modeling for Animation
3 credit(s) 6 period(s) lecture + lab
Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements that make computer models: curves, surfaces, nurbs, and polygons. 3-D translation, shading, materials, and rendering. Prerequisites: ART/MMT184, or ART/MMT184AC, or permission of the instructor.

ART185AA
3-D Modeling for Animation I
1 credit(s) 2 period(s) lecture + lab
Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements of compounding objects and Boolean operations. Prerequisites: ADA/ART/MMT184, or permission of Instructor.

ART185AB
3-D Modeling for Animation II
1 credit(s) 2 period(s) lecture + lab
Basic concepts of 3-D modeling. Creating shapes using line, polygonal object construction, and lofting objects. Prerequisites: ART185AA or permission of Instructor.

ART185AC
3-D Modeling for Animation III
1 credit(s) 2 period(s) lecture + lab
Basic concepts of 3-D modeling and the use of lights, cameras, materials, and other modifiers. Prerequisites: ADA/ART185AB or permission of Instructor.

ART/MMT190
Art of Web Site Design
3 credit(s) 6 period(s) lecture + lab
Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language (HTML), digital text, and graphics. Discussion of color, proportion, typography and Web-specific design principles. Emphasizes design of cross-browser compatible interfaces that optimize usability, accessibility and browser interoperability. Prerequisites: ART100, or permission of Instructor. CIS133DA recommended.

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ART/MMT190AA
Art of Website Design I
1 credit(s) 2 period(s) lecture + lab
Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language, digital text, and graphics. Prerequisites: ART100, or permission of Instructor. CIS133DA recommended.

ART190AB
Art of Website Design II
1 credit(s) 2 period(s) lecture + lab
Producing Web site pages, using design and Hyper Text digital text and graphics. Discussion of color, proportion, typography and Web-specific design principles. Prerequisites: ART100 and ART/MMT190AA, or permission of Instructor. CIS133DA recommended.

ART190AC
Art of Website Design III
1 credit(s) 2 period(s) lecture + lab
Producing Web sites using artistic form and content. Emphasizes design of cross-browser compatible interfaces that optimize usability, accessibility and browser interoperability. Prerequisites: ART100 and ART190AB, or permission of Instructor. CIS133DA recommended.

ART191
Storyboarding and Layout
2 credit(s) 4 period(s) lecture + lab
Introduction to storyboarding including film storytelling and scene presentation. Prerequisites: ART111 or ART187 or ART188.

ART192
Advanced Web Presentation Design
3 credit(s) 6 period(s) lecture + lab
Advanced interactive application and training for Web designers and graphic artists using Quark, Illustrator, Photoshop, HTML Flash, Dreamweaver and Digital Video site optimization techniques. Development of design concepts for web pages that communicate and deliver Web content creatively. Prerequisites: ART/MMT190 or permission of instructor. ART180AM and ART180AN suggested but not required.

ART250
Introduction to Printmaking
3 credit(s) 6 period(s) lecture + lab
Introduction to concepts and techniques involved in Fine Art field of Printmaking. Deals with three most basic Printmaking modes of Serigraphy, Woodcut, and Monoprinting in first part of course. Overview of Etching, Lithography and Papemaking in second part of course. Prerequisites: ART111 and ART113.

ART255
Art Marketing
3 credit(s) 3 period(s) lecture
Career goals, presentation of artist and art work (portfolio, resume, business cards, catalog), pricing and selling works, networking, establishing a studio, promotion and publicity, writing press releases, proposal writing, business ethics, artist rights, copyright law, contracts and agreements, royalties, record keeping, and communication skills. Prerequisites: None.

ART255AA
Self Promotion
1 credit(s) 1 period(s) lecture
Career goals, presentation of artist, communication skills, keeping files and records, developing self-promotional materials. Prerequisites: None.

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ART255AB
The Portfolio
1 credit(s) 1 period(s) lecture
Choosing the right pieces to include, presenting art work, developing the portfolio. Prerequisites: ART255AA or permission of instructor.

ART259
Monoprinting
3 credit(s) 6 period(s) lecture + lab
Introduction to concepts and techniques for Monoprint making. Deals with la prima technique used in painting in first part of course. Multi-plate printing and how method of printing relates to use of color and separation in second part of course. Prerequisites: ART111 and ART113.

ART270
Intermediate Computer
Photographic Imaging
3 credit(s) 6 period(s) lecture + lab
Intermediate microcomputer-based photographic imaging techniques. Refinement of aesthetic awareness and personal expression. Prerequisites: ART177 or (ART177AA and ART177AB).

ART273AC
Special Topics: Multimedia Arts
3 credit(s) 6 period(s) lecture + lab
Multimedia art studio course examining new and/or current topics in media and/or multimedia arts. Prerequisites: Permission of Instructor. Course Note: ART273AC is designed to offer special topics and/or specialized training for students in multimedia arts. Activities may also be appropriate for portfolio enhancement.

ART275
Lost Wax Casting I
3 credit(s) 6 period(s) lecture + lab
Introduction to lost wax casting techniques for jewelry and small sculptures. Emphasis on design concepts as related to three-dimensional forms. Prerequisites: None.

ART276
Lost Wax Casting II
3 credit(s) 6 period(s) lecture + lab
Advanced course in lost wax casting techniques for jewelry and small sculptures. Emphasis on the continuation of individual expression using the lost wax method. Prerequisites: ART275.

ART/ADA283
Computer Aided Graphic Arts II
3 credit(s) 6 period(s) lecture + lab
Advanced skill development of graphic design through use of microcomputer. Emphasis on computer design and techniques for producing all types of camera-ready advertising art for printed matter and package design. Includes illustration, typography, photo imaging, and color separation. Prerequisites: ADA/ART183 or permission of instructor.

ART/ADA285
Multipresentation Graphics
3 credit(s) 6 period(s) lecture + lab
Computer aided design and development of a company identity program; development of a videotape demonstrating market impact; preparation of a portfolio of completed art and graphics. Prerequisites: ART100, ART169, or permission of instructor.

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ART/ADA289
Computer Illustration
3 credits 6 period(s) lecture + lab
Introduction to the multiple elements of commercial illustration using the microcomputer. Basic foundation in the use of computer techniques including color paint and draw programs for the production of commercial illustrations for publications and printed matter. Use of input and output devices. Prerequisites or Corequisites: ART100 or permission of instructor.

ART290AC
Studio Art
3 credits 6 period(s) lecture + lab
Studio course for art majors allowing continuation in a subject field. Prerequisites: Permission of Instructor. Course Note: ART290AC may be repeated for credit.

ART291
Digital Prepress
3 credits 6 period(s) lecture + lab
Introduction to multiple elements of digital prepress concepts and techniques using the microcomputer. Basic foundation in the use of trapping and stripping software for the desktop. Use of electronic page layout techniques including color separations, registration, spot colors, impositions, signatures, and output production devices. Emphasis on prepress concepts. Prerequisites: ART100 or permission of instructor.

ART295++
Art Workshop/Seminars
1, 2, 3 credits 2, 4, 6 period(s) lecture + lab
Advanced level workshop seminar in art disciplines. Prerequisites: Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of Department/Division Chair.

ART297AB
Computer Graphic Design Internship
2 credits 2 period(s) lecture + lab
Computer graphic design work experience in a business or industry. 80 hours of designated work per credit. Maximum of 3 credits allowed. Prerequisites: Departmental approval.

ART298AA-AC
Special Projects
1-3 credits 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

ART – (Photography)

ART131
Photography I
3 credits 6 period(s) lecture + lab
Basic photographic principles and techniques. Basic camera functions and controls. Experience in the image-making process by creating and editing photographs for various display environments. Introduction to the photographic aesthetic and photography's role in society. Prerequisites: None. Course Note: Camera required.

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ART132  
Photography II  
3 credit(s) 6 period(s) lecture + lab  
Advanced camera and darkroom techniques. Aesthetic awareness with personal expression. Prerequisites: ART131, or permission of instructor.

ART133  
Photography III  
3 credit(s) 6 period(s) lecture + lab  
Refinement of aesthetic and technical aspects producing convincing images of highest quality. Prerequisites: ART132 or permission of instructor: ART111 and ART116 recommended but not required.

ART135  
Photojournalism I  
3 credit(s) 6 period(s) lecture + lab  
Basic technical knowledge of photographic process as applied by mass media. Prerequisites: ART131 or permission of instructor.

ART136  
Photojournalism II  
3 credit(s) 6 period(s) lecture + lab  
Continued development of technical approaches utilized by mass media. Prerequisites: ART135.

ART137  
Alternative Photographic Processes  
3 credit(s) 6 period(s) lecture + lab  
Emphasis on development of alternative photographic processes including technique, aesthetics, and creative imagery. Exploration of various types of non-silver photographic processes including cyanotype, Van Dyke, Polaroid imaging, and others. Prerequisites: None.

ART138  
Commercial Photography I  
3 credit(s) 6 period(s) lecture + lab  
Basic techniques of lighting, camera work, and reproduction of commercial photography. Cooperation with commercial art community. Prerequisites: (ART131 or ART142) or permission of instructor.

ART139  
Commercial Photography II  
3 credit(s) 6 period(s) lecture + lab  
Continuation of ART138. Advanced techniques with portfolio organization and presentation. Prerequisites: ART138.

ART140  
Portrait Photography  
2 credit(s) 4 period(s) lecture + lab  
Insight into the profession of Portrait Photography. Application of the principles of design and fine art in lighting, composition, and posing. Prerequisites: ART131 or permission of instructor.

ART142  
Introduction to Digital Photography  
3 credit(s) 6 period(s) lecture + lab  
Fundamentals of digital photography. Includes camera operations, exposure techniques, introduction to digital output, and theory of digital photography. Prerequisites: None. Course Note: Digital camera required.

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ART143
Intermediate Digital Photography
3 credit(s) 6 period(s) lecture + lab
Intermediate theory and techniques of digital photography. Aesthetic awareness and personal expression from image capture through intermediate techniques in the digital darkroom. Introduction to high-resolution digital output. **Prerequisites:** ART142 or permission of instructor. **Course Note:** Semi-adjustable, high-resolution digital camera is required.

ART/ADA177
Computer-Photographic Imaging
3 credit(s) 6 period(s) lecture + lab
Introduction to the multiple elements of microcomputer-photographic imaging. Basic foundation in the use of the photographic manipulation of images using software programs. Special attention to aesthetic foundations underlying photographic composition. **Prerequisites or Corequisites:** ART100 or permission of instructor.

ART234
Color Photography I
3 credit(s) 6 period(s) lecture + lab
Basic principles of color theory, camera and input and output techniques using slide film or digital photography. **Prerequisites:** ART131 or ART142 or permission of instructor. **Course Note:** Film or digital camera required.

ART235
Color Photography II
3 credit(s) 6 period(s) lecture + lab
Basic theories and techniques of color negative materials. **Prerequisites:** ART234 or permission of instructor.

ART290AC
Studio Art
3 credit(s) 6 period(s) lecture + lab
Studio course for art majors allowing continuation in a subject field. **Prerequisites:** Permission of Instructor. **Course Note:** ART290AC may be repeated for credit.

ART295DA, DB, and DC
Art Workshop/Seminar: Photography
1, 2, and 3 credit(s) 2, 4, and 6 period(s) lecture + lab
Advanced level workshop seminar in art disciplines. **Prerequisites:** Minimum of three (3) credits introductory and three (3) credits intermediate level courses in specific field or permission of Department/Division Chair.

ASB, ASM – Anthropology

ASB102
Introduction to Cultural and Social Anthropology
3 credit(s) 3 period(s) lecture
Principles of cultural and social anthropology, with illustrative materials from a variety of cultures. The nature of culture; social, political, and economic systems; religion, aesthetics and language. **Prerequisites:** None.

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ASB/AFR202
Ethnic Relations in the United States
3 credit(s) 3 period(s) lecture
Basic concepts and processes, including historic overview, of interethnic relations in the United States: culture, race, ethnicity, ethnocentrism, prejudice, discrimination, racism, assimilation, acculturation, and individual and group responses to interethnic contact. Cultural knowledge and intercultural communication skills and perspectives as fundamental tools for successful management of social relations in a multicultural world. **Prerequisites:** None.

ASB211
Women in Other Cultures
3 credit(s) 3 period(s) lecture
Cross-cultural analysis of the economic, social, political, and religious factors that affect women's status in traditional and modern societies. **Prerequisites:** None.

ASB214
Magic, Witchcraft and Healing: An Introduction to Comparative Religion
3 credit(s) 3 period(s) lecture
Origins, elements, and forms of religion; a comparative survey of religious beliefs, myths, rituals and symbolism including magic, witchcraft and healing as practiced in selected regions of the world; the place of religion in the total culture. **Prerequisites:** None.

ASB222
Buried Cities and Lost Tribes: Old World
3 credit(s) 3 period(s) lecture
Introduction to archaeology through discoveries and the researchers who made them. Emphasis on methods of archaeological fieldwork and what these discoveries reveal about humanity, including the nature of archaeological inquiry, the development of human social groups, the changing role of religion in evolving societies, the origins of agriculture, the origins of settled lifeways, the rise of cities and complex societies, political strife across different cultures and the forces which tend to fragment societies. Examples drawn from Africa, Asia, Europe, the Pacific Islands, and Australia. **Prerequisites:** None.

ASB223
Buried Cities and Lost Tribes: New World
3 credit(s) 3 period(s) lecture
Introduction to archaeology through discoveries and the researchers who made them. Emphasis on methods of archaeological fieldwork and what these discoveries reveal about humanity, including the nature of archaeological inquiry, the development of human social groups, the changing role of religion in evolving societies, the origins of agriculture, the origins of settled lifeways, the rise of cities and complex societies, political strife across different cultures and the forces which fragment societies. Examples drawn from North American, Central America, and South America. **Prerequisites:** None.

ASB235
Southwest Archaeology
3 credit(s) 3 period(s) lecture
Anthropological perspective and comparative study of the cultures of prehistoric native peoples of the North American southwest. **Prerequisites:** None.

ASB245
Indians of the Southwest
3 credit(s) 3 period(s) lecture
Comparative study of the cultures, including the histories and present status, of Indians of the Southwest. **Prerequisites:** None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
ASM104
Bones, Stones, and Human Evolution
4 credit(s) 5 period(s) lecture + lab
Study of human evolution and variation; including fossil hominids and their tools, primate anatomy and behavior, human genetics, and the environment and human biology. Prerequisites: None.

ASM/FOR275
Introduction to Forensic Anthropology
3 credit(s) 3 period(s) lecture
Introduction to forensic anthropology. Survey of the role of forensic anthropologist, from the crime scene to the courtroom. Understand how a forensic anthropologist can determine life history of an individual. Contributions of forensic anthropology to crime scene and other legal investigations. How forensic anthropology is used to decipher historic cases, and how it is depicted in popular culture. Case studies involving criminal investigations, mass disaster incidents, and global human rights issues. Prerequisites: None.

AST – Astronomy

AST101
Survey of Astronomy
3 credit(s) 3 period(s) lecture
Survey of astronomy for the non-technical student. The history, contents, and evolution of the solar system and the universe in general. Astronomical principles and instrumentation. The planets, moons, sun, comets, stars and star formation, galaxies, and cosmology Prerequisites: None.

AST102
Survey of Astronomy Laboratory
1 credit(s) 3 period(s) lab
Astronomical observations and exercises designed to familiarize students with the sky, telescopes, and methods used in astronomy. Prerequisites: None. May accompany AST101.

AST111
Introduction to Solar System Astronomy
3 credit(s) 3 period(s) lecture
Introduction to astronomy for the non-science major. History of astronomy, properties of light, instruments, the solar system and nearby stars. Prerequisites: MAT092 or equivalent.

AST112
Introduction to Stars, Galaxies, and Cosmology
3 credit(s) 3 period(s) lecture
Introduction to astronomy for the non-science major. Structure and evolution of stars; star clusters; galaxies; cosmology. Prerequisites: MAT092 or equivalent.

AST113
Introduction to Solar System Astronomy Laboratory
1 credit(s) 3 period(s) lab
Astronomical observations and exercises to supplement AST111. Prerequisites or Corequisites: AST111.

AST114
Introduction to Stars, Galaxies, and Cosmology Laboratory
1 credit(s) 3 period(s) lab
Astronomical observations and exercises to supplement AST112. Prerequisites or Corequisites: AST112.

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Revised: 9/2/2011; 10/28/11; 12/7/11
BIO – Biology

BIO100
Biology Concepts
4 credit(s) 6 period(s) lecture & lab
A one-semester introductory course covering basic principles and concepts of biology. Methods of scientific inquiry and behavior of matter and energy in biological systems are explored. Field trips may be required at students' expense.
Prerequisites: None.

BIO105
Environmental Biology
4 credit(s) 6 period(s) lecture & lab
Fundamentals of ecology and their relevance to human impact on natural ecosystems. Field trips may be required at students' expense. Prerequisites: None.

BIO107
Introduction to Biotechnology
4 credit(s) 6 period(s) lecture & lab
Introduction to biotechnology and its global impact on society. Covers applications, laboratory techniques, limitations and the international economic benefits, risks, and legal and moral issues associated with biotechnology. Prerequisites: None.

BIO108
Plants and Society
4 credit(s) 6 period(s) lecture & lab
A global study of plants in relation to humans; as a source of food, fiber, drugs, and other products; for aesthetic value, survival, and energy. Prerequisites: None.

BIO109
Natural History of the Southwest
4 credit(s) 6 period(s) lecture & lab
Study of the common plants and animals of the Southwest including their distribution, adaptation, behavior, and ecology. Introduction to basic field and laboratory techniques used in the study of natural history. Specific field problems presented dealing with plant and animal analysis and ecological interrelationships. Prerequisites: None. Course Note: Field trips may be required.

BIO145
Marine Biology
4 credit(s) 6 period(s) lecture & lab
A survey of marine environments and their biotic communities with emphasis on the natural history of marine organisms. Prerequisites: None.

BIO148
Coral Reef Ecology
1 credit(s) 1 period(s) lecture
Introduction to ecology of coral reefs. Emphasis on reef environments, corals, reef fishes, and human impacts on reefs. Prerequisites: None.

BIO149
Field Biology Modules AF-AO
0.5-4 credit(s) 3.5-28 period(s) lab
Field expeditions designed to study natural history of selected geographical locations. Field observations of behavior, distribution, and adaptations of organisms within natural communities emphasized. May be repeated for up to four hours of elective credit. Prerequisites: None.

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BIO156
Introductory Biology for Allied Health
4 credit(s) 6 period(s) lecture & lab
An introductory biology course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell biology, histology, microbiology, and genetics. **Prerequisites:** None. One year high school chemistry or one semester of college-level chemistry recommended.

BIO160
Introduction to Human Anatomy and Physiology
4 credit(s) 6 period(s) lecture & lab
Principles of scientific method. Structural organization, homeostasis and control mechanisms of the body. Specific chemistry concepts. Structure and function of the major systems of the body. **Prerequisites:** None.

BIO181
General Biology (Majors) I
4 credit(s) 6 period(s) lecture & lab
The study and principles of structure and function of organisms at the molecular and cellular levels. A detailed exploration of the chemistry of life, the cell, and genetics. **Prerequisites:** None. One year of high school or one semester of college-level biology and chemistry is strongly recommended.

BIO182
General Biology (Majors) II
4 credit(s) 6 period(s) lecture & lab
The study and principles of structure and function of living things at cellular, organismic, and higher levels of organization. A detailed exploration of the mechanisms of evolution, biological diversity, biology of organisms, and ecology. **Prerequisites:** A grade of C or better in BIO181. **Course Note:** Field trips may be required.

BIO201
Human Anatomy and Physiology I
4 credit(s) 6 period(s) lecture & lab
Study of structure and function of the human body. Topics include cells, tissues, integumentary system, skeletal system, muscular system, and nervous system. **Prerequisites:** (BIO156 or BIO181 with a grade of "C" or better) or (one year high school biology course with a grade of "C" or better). (CHM130 or higher numbered CHM prefixed course) or (one year of high school chemistry) suggested but not required.

BIO202
Human Anatomy and Physiology II
4 credit(s) 6 period(s) lecture & lab
Continuation of structure and function of the human body. Topics include endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive systems; and fluid and electrolyte balance. **Prerequisites:** A grade of "C" or better in BIO201.

BIO205
Microbiology
4 credit(s) 6 period(s) lecture & lab
Study of microorganisms and their relationship to health, ecology, and related fields. **Prerequisites:** (BIO156 or BIO181 with a grade of "C" or better) or (one year high school biology with a grade of "C" or better). (CHM130 or higher numbered CHM prefixed course) or (one year of high school chemistry) suggested but not required.

BIO214
Biotechnology Internship
4 credit(s) 4 period(s) lecture
Internship experience in a biotechnology laboratory. Requires 320 clock hours in the laboratory setting. Setting, achieving, and evaluating goals for hands-on learning experience in a biotechnology laboratory. Development of skills and knowledge needed to work in a biotechnology laboratory. **Prerequisites:** Permission of program director. **Corequisites:** BIO212AC.

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BIO215
Biotechnology Internship
3 credit(s) 3 period(s) lecture
Internship experience in a biotechnology laboratory. Setting, achieving, and evaluating goals for hands-on learning experience in a biotechnology laboratory. Development of skills and knowledge needed to work in a biotechnology laboratory. Prerequisites: Permission of Program Director and (BIO212AA, or BIO212BA, or BIO208, or BIO209). Course Note: BIO215 requires 240 clock hours in the laboratory setting.

BIO298AA, AB, AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

BLT – Building Safety and Construction Technology

BLT120
Techniques of Building Inspection
3 credit(s) 3 period(s) lecture
Theory and practice of zoning, foundation, structural, mechanical and electrical inspection in modern residential and commercial construction. Prerequisites: None.

BLT122
Basic Engineering for Building Inspectors and Contractors I
3 credit(s) 3 period(s) lecture
Basic engineering mechanics, gravity loads, shears, bending moments, wood frame construction, deck joints, beams, columns, bracing and shear walls. Prerequisites: BLT120 and MAT187 or equivalent, or departmental permission.

BLT124
Designing for the Americans with Disabilities Act (ADA)
3 credit(s) 3 period(s) lecture
In-depth analysis of federal standards described in the Americans with Disabilities Act (ADA). Reviews the state of Arizona's enforcement document (AzDAAG). Focuses on helping designers, architects, and building officials create barrier-free buildings and facilities. Prerequisites: None.

BLT126
Soil Mechanics
3 credit(s) 3 period(s) lecture
Soil conditions as related to modern building requirements. Topics include bearing value, classification and identification, exploration and samplings, behavior of fills, compaction, subsurface drainage, and field sampling. Prerequisites: MAT102.

BLT128
Mechanical Codes
3 credit(s) 3 period(s) lecture
Code requirements and construction practices. Topics include duct work, conductors and fuel supply, insulation, and controls. Prerequisites: None.
BLT129
Materials of Construction
3 credit(s) 3 period(s) lecture
Fundamental characteristics of modern construction materials and the effective use of these materials in construction. Prerequisites: None.

BLT131
Applied Electric Codes
4 credit(s) 4 period(s) lecture
National Electric Code (NEC) administration and application. NEC requirements for safe installation of system control equipment and design of electric utilization systems. Identification of wiring systems and permitted uses. Application of NEC requirements for hazardous locations, specific occupancies, and special uses of electric equipment. Prerequisites: None.

BLT132
Applied Plumbing Codes
4 credit(s) 4 period(s) lecture
Plumbing code administration. Application, design and installation of drainage/waste and venting systems in private and public buildings. Application of plumbing codes for design and installation of water systems. Prerequisites: None.

BLT200
Construction Management: Field Operations
3 credit(s) 3 period(s) lecture
Skills and techniques necessary for management of construction field operations. Includes job scheduling, inspection techniques, personnel relations, safety, and the scope and supervision of the overall construction process. Prerequisites: DFT126, GTC121, or departmental permission.

BLT201
Construction Management: Office Operations
3 credit(s) 3 period(s) lecture
Develops the skills and techniques necessary for successful management of construction office operations. Includes establishing and financing the business, marketing, office operations, and relationships with other construction industry entities. Prerequisites: DFT122, DFT126, GTC121 or instructor approval.

BLT263AK
Building Codes: IBC
3 credit(s) 3 period(s) lecture
Designed specifically to acquaint students with safety principles of building construction under the International Building Code (IBC), including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant materials, and ratings and occupancy requirements. Prerequisites: None.

BLT263AL
Building Codes: IRC
3 credit(s) 3 period(s) lecture
Designed specifically to acquaint students with safety principles of building construction under the International Residential Code, including structural requirements for wood, masonry and concrete, fire resistance of building construction, fire resistant materials, and ratings and occupancy requirements. Prerequisites: None.

BPC – Business–Personal Computers

BPC005
Brief Introduction to Computers
0.25 credit(s) 0.25 period(s) lecture
Introductory course in fundamentals of computers, including hardware components, operating system characteristics, and basic software applications. Prerequisites: None.

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BPC100AA
Business-Personal Computers I
0.5 credit(s) 0.5 period(s) lecture
Introduction to the use of personal computers in the business environment. Computer hardware components, operating system functions and concepts. Running application software. **Prerequisites:** None.

BPC101AA
Introduction to Computers I
1 credit(s) 2 period(s) lecture
Computer software applications for the personal computer, including electronic spreadsheet and word processing, keyboarding review, and a desktop environment. **Prerequisites:** None.

BPC101BA
Introduction to Computers II
1 credit(s) 1 period(s) lecture
Computer software applications for the personal computer, including database management, computer graphics, electronic spreadsheet, and word processing, and operating system commands. **Prerequisites:** BPC101AA.

BPC101CA
Introduction to Computers III
1 credit(s) 1 period(s) lecture
Individualized advanced applications of software selected to solve specific problems on the personal computer. **Prerequisites:** BPC101BA or permission of instructor.

BPC102AD
Using Windows: Level I
0.5 credit(s) 0.5 period(s) lecture
Basic commands and methods associated with the Windows operating system. **Prerequisites:** None.

BPC103AK
Using Word: Level I
0.5 credit(s) 0.5 period(s) lecture
Use of Word to create, manipulate and print documents on a microcomputer. **Prerequisites:** None.

BPC104AD
Using Excel: Level I
0.5 credit(s) 0.5 period(s) lecture
Use of Excel to create, edit, save and print worksheets. **Prerequisites:** None.

BPC110
Computer Usage and Applications
3 credit(s) 4 period(s) lecture + lab
Introduction to business and personal computer operations and usage. Software applications for analyzing and solving business problems including word processing, spreadsheet, database, and presentation graphics. **Prerequisites:** None.

BPC/OAS111AA
Computer Keyboarding I
1 credit(s) 1.7 period(s) lecture + lab
Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. **Prerequisites:** None.

BPC/CIS114AE
Excel: Level I
1 credit(s) 2 period(s) lecture + lab
Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting and projections. **Prerequisites:** None.

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BPC/CIS114BE
Excel: Level II
1 credit(s) 2 period(s) lecture + lab
Additional Excel spreadsheet techniques, including macro programming, database searching, extraction, and linking to obtain prescribed reports and graphs. **Prerequisites:** BPC/CIS114AE or permission of instructor.

BPC/CIS114CE
Excel: Level III
1 credit(s) 2 period(s) lecture
Additional Excel spreadsheet techniques, including complex macros, statistics, and matrix manipulation. Project design using multiple, integrated spreadsheets. **Prerequisites:** BPC/CIS114BE or permission of instructor.

BPC115AA
Personal Finance Software:
Quicken — Level I
1 credit(s) 2 period(s) lecture + lab
Introduction to the basic features of Quicken, a computerized personal finances software program. **Prerequisites:** None.

BPC/CIS117AM
Database Management:
Microsoft Access - Level I
1 credit(s) 2 period(s) lecture + lab
Introduction to the basic elements of a current version of the Microsoft Access database management program, for casual and beginning users. **Prerequisites:** None.

BPC/CIS117BM
Database Management:
Microsoft Access - Level II
1 credit(s) 2 period(s) lecture + lab
Exploration of additional components of the Microsoft Access database management program. **Prerequisites:** BPC117AM or CIS117AM or permission of instructor.

BPC/CIS117CM
Database Management - Microsoft Access - Level III
1 credit(s) 1 period(s) lecture + lab
Application of the features of the Microsoft Access program to some common database management problems. **Prerequisites:** BPC117BM or CIS117BM.

BPC/CIS118AB
PowerPoint: Level I
1 credit(s) 2 period(s) lecture + lab
Use of PowerPoint software to produce professional-quality presentation visuals. **Prerequisites:** None.

BPC/CIS118BB
PowerPoint: Level II
1 credit(s) 2 period(s) lecture + lab
Use of PowerPoint software add movement and sound to desktop presentations to enhance audience attention. **Prerequisites:** BPC/CIS118AB.

BPC/CIS118CB
PowerPoint: Level III
1 credit(s) 1 period(s) lecture + lab
Use of PowerPoint software for advanced desktop presentation techniques, including advanced animation and sound sequences. **Prerequisites:** BPC/CIS118BB.

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BPC/CIS120AF
Computer Graphics: Adobe Photoshop: Level I
1 credit(s) 2 period(s) lecture + lab
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Basic foundation course in the use of electronic techniques to select, manipulate, and edit images, for graphic design and image correction. Prerequisites: None.

BPC/CIS120BF
Computer Graphics:
Adobe Photoshop: Level II
1 credit(s) 2 period(s) lecture + lab
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Includes working with masks, channels and layers, and combining raster and vector graphics. Prerequisites: BPC/CIS120AF.

BPC/CIS121AB
Microsoft Command Line Operations
1 credit(s) 2 period(s) lecture + lab
Use of the Microsoft command line interface: basic concepts, internal and external commands, subdirectories, and editor. Prerequisites: None.

BPC/CIS121AE
Windows Operating System: Level I
1 credit(s) 2 period(s) lecture + lab
Specific topics include Windows basics, navigating and customizing the desktop, maintaining hardware and software, improving performance, configurations, securing your computer, taskbar, organizing, searching and managing folders and files, installing and uninstalling applications, Internet Explorer fine tuning, security, and searching, including advanced search techniques, keyboard shortcuts, and current topics. Prerequisites: None.

BPC/CIS122AE
Windows Operating System: Level II
1 credit(s) 2 period(s) lecture + lab
Additional capabilities of the Windows program that configure devices and customize the presentation of the operating system. System tools, control panel utilities, the My Computer, Network Neighborhood, and Microsoft Exchange desktop icons. Other helpful utilities presented. Prerequisites: BPC/CIS121AE or permission of instructor.

BPC125
Microcomputer Set Up and Maintenance
1 credit(s) 1 period(s) lecture + lab
How to install and maintain a microcomputer (personal computer). Steps used to set up a new or add options to a previously installed microcomputer. Installation of internal options (memory, graphics, modems, etc.), as well as external options and devices (printers, monitors, communications, etc.). Troubleshoot (identify and repair or have repaired) microcomputer problems. Prerequisites: None.

BPC128
Introduction to Desktop Publishing
1 credit(s) 2 period(s) lecture + lab
Presents basic concepts of commercially prepared software used to do desktop publishing. Incorporates a combination of narrative and pictorial/graphic creation and presentation, including set up, text entry, graphic generation, text and graphic merging, and other computer-based functions. Prerequisites: None.
**BPC128AF**
Introduction to Desktop Publishing: MS Publisher
1 credit(s) 2 period(s) lecture + lab
Presents basic concepts of commercially prepared software used to do desktop publishing. Incorporates a combination of narrative and pictorial/graphic creation and presentation, including set-up, text entry, graphic generation, text and graphic merging, and other computer-based functions. **Prerequisites:** None.

**BPC/OAS130DK**
Beginning Word
1 credit(s) 2 period(s) lecture
Using Word for Windows to create, edit, and print documents. **Prerequisites:** Ability to keyboard a minimum of 20 wpm or permission of instructor.

**BPC/CIS133AA**
Internet/Web Development Level I-A
1 credit(s) 2 period(s) lecture + lab
Overview of the Internet and its resources. Hands-on experience with various Internet communication tools. **Prerequisites:** None.

**BPC/CIS133BA**
Internet/Web Development Level I-B
1 credit(s) 1 period(s) lecture + lab
Exploration of additional Internet resources. Hands-on experience with a variety of resource discovery and information retrieval tools as well as enhancement of Web pages. **Prerequisites:** BPC/CIS133AA.

**BPC/CIS133CA**
Internet/Web Development Level I-C
1 credit(s) 1 period(s) lecture + lab
Web site development using enhancement codes. Includes frames, style sheets and javascript as well as design principles and typography. **Prerequisites:** BPC/CIS133BA.

**BPC/CIS133DA**
Internet/Web Development Level I
3 credit(s) 4 period(s) lecture + lab
Overview of the Internet/WWW and its resources. Hands-on experience with various Internet/WWW communication, resource discovery, and information retrieval tools. Web page development is also included. **Prerequisites:** None.

**BPC135DD**
WordPerfect: Level I
2 credit(s) 2 period(s) lecture
Using WordPerfect word processing software to create and name files, edit text, format, and print a variety of documents. **Prerequisites:** The ability to use a keyboard at a minimum of 24 wpm or permission of Instructor.

**BPC/OAS135DK**
Word: Level I
2 credit(s) 2 period(s) lecture
Using Word word processing software to create and name files, edit text, format, and print a variety of documents. **Prerequisites:** None.

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BPC138AA
Windows Desktop Design and Publishing
3 credit(s) 4 period(s) lecture + lab
Use of Windows-based microcomputers and appropriate commercial software packages to compose and print textual and graphic materials of high quality. Includes overview of micro operating system, word processing of copy, use of graphics programs, layout of design elements, and printing alternatives. Prerequisites: CIS105 or BPC110 or permission of instructor.

BPC170
Computer Maintenance I: A+ Essentials Prep
3 credit(s) 4 period(s) lecture + lab
Technical aspects of the microcomputer, including system setup (hardware and software) and basic troubleshooting. Emphasis on basic troubleshooting, use of tools, hardware components and hardware/software interfacing. Prerequisites: CIS105, or permission of Instructor.

BPC225
Computer Configuration and Enhancement
1 credit(s) 2 period(s) lecture + lab
Configuration and enhancement of a computer. Emphasis on configuration of hardware and software to optimize computer performance. Includes memory configuration and the identification and troubleshooting of configuration problems. Prerequisites: BPC125 or permission of instructor.

BPC235DD
WordPerfect: Level II
2 credit(s) 2 period(s) lecture
Using WordPerfect word processing software features such as math, columns, macros, styles, graphics, sort, outlines, and table of contents. Prerequisites: BPC135DD or permission of instructor.

BPC/OAS235DK
Word: Level II
2 credit(s) 2 period(s) lecture
Using Word word processing software features such as math, columns, macros, styles, graphics, sort, outlines, and table of contents. Prerequisites: BPC/OAS135DK or permission of instructor.

BPC270
Computer Maintenance II: A+ Technician Prep
3 credit(s) 4 period(s) lecture + lab
Advanced technical aspects of maintaining and servicing computers. Emphasis placed on installation, periodic maintenance, diagnosis, and/or problem resolution. Helps prepare students for the CompTIA A+ technician examinations including Information Technology (IT) field technician, remote support technician and bench technician. Prerequisites: BPC170 with grade of C or better, or permission of instructor.

CCS – Chicana and Chicano Studies

CCS101
Chicana and Chicano Studies
3 credit(s) 3 period(s) lecture
Introduction to the wealth and diversity of Chicana and Chicano Studies research from a variety of disciplinary perspectives through the use of a series of historical and social scientific studies, novels, testimonios, and films. Prerequisites: ENG101, or ENG107, or equivalent.

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CCS/POS230
Public Policy and Civic Engagement: César Chávez Legacy
3 credit(s) 3 period(s) lecture + lab
Exploration of democratic citizenship in a multicultural society. Focus on the role of the activist in public policy service, community organizing, and social change strategies such as communication, social movement theory perspectives, and how leaders maintain movement momentum. Interpretation of the vision, philosophy, and work of César E. Chávez; and accomplishments by citizens (individually and collectively) in social change and opposition. Special emphasis on community engagement participation. Prerequisites: None. Course Notes: CCS230 requires a minimum of 16 hours of civic engagement participation with community partners.

CCS282AA-AC
Volunteerism for Chicana and Chicano Studies: A Service Learning Experience
1-3 credit(s) 1-3 period(s) lab
Service learning field experience within private/public agencies such as museums and libraries, and citizen volunteer groups. May be repeated for a total of six (6) CCS282 credit hours; may not repeat specific assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of instructor.

CCS298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

CET – Civil Engineering Technology

CET101
Surveying I
3 credit(s) 5 period(s) lecture & lab
Fundamental surveying principles including theory and field work using the level and transit, horizontal measurement by tape or stadia, benchmark and profile leveling traverse surveys and computations, establishment of line and grade. Designed to develop semi-professional personnel working for private or government engineering agencies. Prerequisites: DFT107, or GTC108, or GTC161, or MAT182, or MAT187 or equivalent, or departmental permission.

CET102
Surveying II
3 credit(s) 5 period(s) lecture & lab
Surveying principles including triangulation, municipal and land surveys, topographic surveys, earthwork, state plane coordinate systems, stadia methods, practical astronomy, highway curves, superelevations and construction. Prerequisites: CET101 or departmental permission.

CET103
Construction Methods
3 credit(s) 3 period(s) lecture
Modern construction techniques: planning methods, critical path method (CPM), excavation and earthmoving practices, estimating and work scheduling, concrete design and placement practices. Includes reinforced concrete, prestressed concrete, carpentry, asphalt characteristics, proper proportioning of aggregate and important safety methods. Introduction to heavy construction equipment use. Prerequisites: None.

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CET105
Highway Technology
3 credit(s) 3 period(s) lecture
Economics of highway locations, rights-of-way, curves, drainage problems, bridge structures, road building equipment, highway financing, and administrative problems at the state, county and city levels. **Prerequisites:** None.

CET150
Introduction to Geodesy and Map Projections
3 credit(s) 3 period(s) lecture
Coordinate frames used in geodesy, photogrammetry, surveying, and mapping. Cartesian, spherical, and ellipsoidal coordinates. Introduction to kinematics, gravity field, and size and shape of earth. Positioning in three dimensions. Introduction to map projections and associated coordinate systems. Theory and application of the plane coordinate systems with emphasis on Arizona. Development of projections from Global Positioning System (GPS) observations. **Prerequisites:** (CET102 and MAT182) or departmental permission.

CET171
Construction Contracts
3 credit(s) 3 period(s) lecture
Legal aspects of construction contracts, writing and interpretation of specifications, prequalifications, and use of performance bonds. **Prerequisites:** None.

CET201
Boundary Control & Legal Principles I
3 credit(s) 3 period(s) lecture
Principles of land surveying, boundary controls, ethical and legal principles, and office practices. **Prerequisites:** CET101 or departmental permission.

CET202
Boundary Control & Legal Principles II
3 credit(s) 3 period(s) lecture
Application of principles to actual case studies. Emphasis on proper form and clarity in legal description writing. Procedure for filing subdivision plats and preparation for land surveyors’ registration examinations. **Prerequisites:** CET201 or departmental permission.

CET205
Photogrammetry
3 credit(s) 3 period(s) lecture
An introduction to the study of aerial cameras, equipment, flight procedures, and interpretation of aerial photographs, including stereoscopic principles used in planimetric and topographic maps, map projections, grids, and forms. Practical applications of principles stressed. **Prerequisites:** CET102 or departmental permission.

CET211
Strength of Materials
3 credit(s) 3 period(s) lecture
A study of strength and application of the materials of engineering construction, including the mechanics of beams, shafts, and bolted and welded connections under various loading conditions. **Prerequisites:** DFT107, or ELT102, or (MAT151 and MAT182), or MAT187, or equivalent, or permission of department.

CET241
Fundamentals of Traffic Engineering
3 credit(s) 3 period(s) lecture
Basic study of traffic movement, ordinances, mechanical controls, planning, street and highway design, parking, and traffic engineering organization. Training for personnel as civil engineer technicians. **Prerequisites:** None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
CET250
Public Land Survey System
3 credit(s) 3 period(s) lecture
Overview of unique requirements to determine land boundaries according to the Manual of Instructions for the Survey of Public Lands of the United States, including history of the system, lotted sections, proportioning, subdividing, and evidence analysis. Emphasis on rules in order to perform any boundary survey, particularly for Arizona. Prerequisites: CET102 and CET201.

CET257
Route and Construction Surveying
3 credit(s) 3 period(s) lecture + lab
Principles and field practice of route and construction surveying, including route control surveys, construction control, topographic mapping, highway curves, and computations for roadways, utilities, bridges, buildings, small commercial sites, and subdivisions. Prerequisites: CET102 or department permission.

CFS – Child/Family Studies

CFS101AH
Art Activities for the Young Child
1 credit(s) 1 period(s) lecture
(Not offered every semester)
The creative use of art media and techniques at appropriate developmental levels. Prerequisites: None.

CFS101AP
Science Activities for the Young Child
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Interpreting the study of science in early childhood education as a part of a dynamic growth process offered by the child's daily life experiences. Prerequisites: None.

CFS106
Stress Management in the Family
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Impact of stress factors on the family. Managing time and stress in the home. Options for coping with anxiety. Prerequisites: None.

CFS109
Parent/Child Communication
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Communication between parents and children. Developing self-esteem, responsibility and empathic listening. Pitfalls to communication. Prerequisites: None.

CFS114
Working With the Hyperactive Child
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Causes of hyperactivity in children; focus on the family's role in identification, treatment and school/community support. Prerequisites: None.

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CFS116
Discipline and Guidance
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Age appropriate principles for disciplining and guiding young children's behavior in child care settings, including interpersonal and environmental strategies. Observational opportunities provided. Prerequisites: None.

CFS121AA
Single Parent Family-Adjustment
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Overview of issues facing single parent families. Examination of adjustment issues with emphasis on relationships. Methods of adapting family life to meet the needs and variations of one-parent families. Prerequisites: None.

CFS125
Safety in Early Childhood Settings
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Fundamental concepts of promoting a safe, but challenging learning environments. Establishing and maintaining safety procedures in the early childhood setting. Emphasis on indoor and outdoor equipment and activities, risk analysis, accident, evacuation, and emergency plans, regulations, regulatory agencies and resources, current topics, and innovative practices. Prerequisites: None.

CFS/PSY130
Demystifying Adolescence
1 credit(s) 1 period(s) lecture
(Not offered every semester)
A holistic overview of the physical, social, and emotional development of adolescents. Emphasis on effective skills necessary for working with adolescents and their families. Prerequisites: None.

CFS157
Marriage and Family Life
3 credit(s) 3 period(s) lecture
Study of marriage and the family as a social system, including models of family analysis, intra- and interpersonal relations, and cross-cultural and historical patterns. Prerequisites: None.

CFS/ECH176
Child Development
3 credit(s) 3 period(s) lecture
Study of the science of human development from conception through adolescence. Includes observation skills, parent and adult roles in the lives of children, and contemporary issues. Prerequisites: None.

CFS177
Parent-Child Interaction
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Positive methods to strengthen relationships and resolve conflicts with children. Focus on effective interpersonal skills and guidance techniques. Prerequisites: None.

For additional information on PC program competencies, visit:
http://www.maricopa.edu/academic/ccta/curric/progpc.php

For additional information on MCCCD course competencies, visit:
http://www.maricopa.edu/academic/ccta/curric/cs.php

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CFS178
Survey of Early Childhood Education
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Orientation to basic concepts of day care and nursery programs. History and philosophy of child care services including state regulations governing those services. Observation opportunities provided. Prerequisites: None.

CFS182
Parenting the Early Adolescent: Ages Ten to Fourteen
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Emphasis on the early adolescent developmental period, ages ten to fourteen, and the importance of the parent-child relationship, as well as strategies to ensure successful teen years. Prerequisites: None.

CFS183
Contemporary Issues in Adolescence
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Current issues that impact adolescent development and behavior explored. Comprehensive and specific strategies for addressing these issues as parents or professionals working with teens emphasized. Issues related to adolescent sexuality, abuse, mental health, violence, and risk behaviors included. Prerequisites: None.

CFS205
Human Development
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Explores the growth and development process over the human life span. Research and theoretical approaches; physical, cognitive, social, and personality development from birth through adulthood and death. Prerequisites: None.

CFS212
Creative Activities for the Young Child
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Children's development in play, creativity and the arts. Focus on learning environment for creative expression. Field experiences with children in groups required. Prerequisites: CFS176 or ECH176 or permission of instructor.

CFS232
Developing Child: Theory-Practice, Birth-Prekindergarten
3 credit(s) 3 period(s) lecture
Understanding and working with young children, birth through prekindergarten. Development of young children's physical, emotional, social, cognitive and linguistic characteristics. Special focus on children from diverse multicultural backgrounds. Typical and atypical development. Implications for teachers and parents. Includes opportunities for observations and curriculum planning. Prerequisites: None.

CFS234
Child Development, Theory into Practice, Ages 5-8, K-3
3 credit(s) 3 period(s) lecture
Understanding and working with young children, ages 5-8, K-3. Development of young children's physical, social, emotional, cognitive, and linguistic characteristics. Special focus on children from diverse multicultural backgrounds. Typical and atypical development. Implications for teachers and parents. Includes opportunities for observations and teamwork. Prerequisites: CFS232.

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CFS242
Curriculum Planning for Diversity
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Practical early childhood classroom applications for a diverse population, including integration of cultures, generations, genders, and races into the classroom, facilitation of second language acquisition, and practical teaching strategies which are also developmentally appropriate. Prerequisites: CFS/ECH176.

CFS256
Management in the Family
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Management as a means to the realization of individual and family values and goals; creation, allocation, and use of resources. Focus on decision making. Prerequisites: None.

CFS257
Working with Families with Diverse Needs
3 credit(s) 3 period(s) lecture
(Not offered every semester)
A collaborative approach to working with families with diverse needs. Examines the effect of specific challenges on the family system. Presents techniques for those working with families to facilitate stress management, conflict resolution, and utilization of community and personal resources to aid in the strengthening of the family unit. Prerequisites: None.

CFS263
Child and Family Studies Seminar
1 credit(s) 1 period(s) lecture
Classroom portion of Child and Family Studies Internship. Emphasizes the blend of job-related activities including career exploration, employment procedures, human relations, and on-the-job problems. Prerequisites: Departmental approval. Corequisites: CFS264AA or CFS264AB or CFS264AC, initial enrollment in internship module.

CFS264AA
Child and Family Studies Internship
1 credit(s) 5 period(s) lab
Laboratory portion of Child and Family Studies Internship. Five hours of work weekly. Supervision and evaluation by a coordinator. May be repeated for a total of six (6) credits. Prerequisites: Departmental approval. Corequisites: CFS263, when initially enrolled in CFS264AA or CFS264AB or CFS264AC module.

CFS264AB
Child and Family Studies Internship
2 credit(s) 10 period(s) lab
Laboratory portion of Child and Family Studies Internship. Ten hours of work weekly. Supervision and evaluation by a coordinator. May be repeated for a total of six (6) credits. Prerequisites: Departmental approval. Corequisites: CFS263, when initially enrolled in CFS264AA or CFS264AB or CFS264AC module.

CFS264AC
Child and Family Studies Internship
3 credit(s) 15 period(s) lab
Laboratory portion of Child and Family Studies Internship. Fifteen hours of work weekly. Supervision and evaluation by a coordinator. May be repeated for a total of six (6) credits. Prerequisites: Departmental approval. Corequisites: CFS263, when initially enrolled in CFS264AA or CFS264AB or CFS264AC module.

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CFS/ECH271
Arranging the Environment
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Exploration of the influence of the environment on the behavior of young children. Indoor and outdoor spaces considered and analysis of environments practiced. Prerequisites: None.

CFS/ECH275
Literacy Development and the Young Child
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Literacy from birth through the early childhood years. Focus on developmentally appropriate ways to encourage speaking, listening, writing, and reading in the home and classroom. Prerequisites: None.

CFS277
Adult-Adolescent Interaction
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Prepares social service workers, teachers, and parents to interact effectively with teenagers. Develops understanding of the interaction between adolescents and their families. Teaches practical strategies to deal with specific problem areas. Prerequisites: None.

CFS281
Adolescent School Success
1 credit(s) 1 period(s) lecture
(Not offered every semester)
An overview of factors that contribute to adolescent school success, including family-school interactions, special needs adolescents, and problem areas. Emphasis on strategies and resources to facilitate school success. Prerequisites: None.

CFS283
Multicultural Early Child Education
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Practical early childhood classroom applications for a diverse ethnic population, including integration of multicultures into the classroom, facilitation of a second language acquisition, and practical teaching strategies which are also developmentally appropriate. Prerequisites: CFS/ECH176.

CFS/ECH287
Professional Development in Early Childhood Education
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Emerging professionalism within the field of early childhood education. Consideration of job responsibilities, rewards, ethics and current issues facing practitioners. Includes assessment and career planning. Prerequisites: None.

CFS/ECH288
Community Resources and Referral
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Survey of current community agencies, resources, and support groups for a variety of child and family needs. Considers appropriate procedures for referral, handling of information, confidentiality and follow up. Prerequisites: None.

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CFS290AA
Child Abuse: Identification and Reporting in Child Care Settings
1 credit(s) 1 period(s) lecture
(Not offered every semester)
Identification, recording, and reporting by child care providers of sexual abuse, physical abuse, or neglect of young children. **Prerequisites:** None.

CHD – Chemical Dependency

CHD284
Current CD Issues Seminar
0.5 credit(s) 0.5 period(s) lecture
Special topics in chemical dependency with an emphasis on current issues not covered in other chemical dependency courses. May be repeated for a total of three (3) credit hours. **Prerequisites:** None.

CHD285
Chemical Dependency Seminar
1 credit(s) 1 period(s) lecture
Special topics in chemical dependency with an emphasis on current issues not covered in other chemical dependency courses. **Prerequisites:** None. **Course Note:** May be repeated for a total of four (4) credit hours.

CHM – Chemistry

CHM090
Preparation for Fundamental Chemistry
1 credit(s) 1 period(s) lecture
A developmental course designed to review basic math and chemistry principles for students deficient or insecure in these areas. Stresses individualized instruction and hands-on experience. Serves to prepare the student for CHM130. **Prerequisites:** None.

CHM107 and 107LL
Chemistry and Society and Lab
4 credit(s) 6 period(s) lecture & lab
**LEC:** A survey of chemistry and its impact on the environment. Completion of CHM107LL is required to meet the Natural Science requirement. **Prerequisites:** None. **LAB:** Laboratory experience in support of CHM107. **Prerequisites or Corequisites:** CHM107.

CHM130 and 130LL
Fundamental Chemistry and Lab
4 credit(s) 6 period(s) lecture & lab
**LEC:** A survey of the fundamentals of general chemistry. Emphasis on essential concepts and problem solving techniques. Basic principles of measurement, chemical bonding, structure and reactions, nomenclature, and the chemistry of acids and bases. Preparation for students taking more advanced courses in chemistry. Designed to meet needs of students in such diverse areas as agriculture, nursing, home economics, physical education and water technology. **Prerequisites:** Grade of "C" or better in CHM090, or MAT090, or MAT091, or MAT092, or MAT093, or MAT102, or (MAT103AA and MAT103AB), or satisfactory score on math placement exam. **LAB:** Laboratory experience in support of CHM130. **Prerequisites or Corequisites:** CHM130.

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CHM138 and 138LL
Chemistry For Allied Health and Lab
4 credit(s) 6 period(s) lecture & lab
LEC: Elements of fundamental and organic chemistry. Includes the general chemical behavior of inorganic matter and the structure of organic and biochemical systems. This course is designed for specific allied health programs at MCCCD. It may not be applicable to other allied health programs or transferable. Prerequisites: Grade of "C" or better in CHM090; or one year of high school chemistry with a grade of "C" or better; or MAT092 or MAT102 or satisfactory score on placement exam. LAB: Laboratory experience in support of CHM138, Chemistry for Allied Health. Prerequisites: None. Corequisites: CHM138.

CHM150
General Chemistry I
4 credit(s) 4 period(s) lecture
Detailed study of principles of chemistry for science majors and students in pre-professional curricula. Prerequisites: (CHM130 and CHM130LL), or (one year of high school chemistry with a grade of C or better taken within the last five years), and completion of intermediate algebra or equivalent. Completion of all prerequisites within the last two years is recommended. Course Note: Students may receive credit for only one of the following: CHM150 or CHM151.

CHM151 and 151LL SUN+ CHM1151
General Chemistry I and Lab
4 credit(s) 6 period(s) lecture & lab
LEC: Detailed study of principles of chemistry for science majors and students in pre-professional curricula. Prerequisites: (CHM130 and CHM130LL), or (one year of high school chemistry with a grade of C or better taken within the last five years), and completion of intermediate algebra or equivalent. Completion of all prerequisites within the last two years is recommended. Course Note: Students may receive credit for only one of the following: CHM150 or CHM151. LAB: Laboratory experience in support of CHM151. Prerequisites: CHM130LL or permission of instructor. Prerequisites or Corequisites: CHM150 or CHM151.

CHM152 and 152LL SUN+ CHM1152
General Chemistry II and Lab
4 credit(s) 6 period(s) lecture & lab
LEC: A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Completion of CHM152LL required to meet the Natural Science requirement. Prerequisites: CHM150 or CHM151 and CHM151LL. Completion of CHM150 or CHM151 and CHM151LL within the last two years recommended. LAB: Laboratory experience in support of CHM152. Prerequisites: CHM151LL or equivalent. Prerequisites or Corequisites: CHM152.

CHM230 and 230LL SUN+ CHM2230
Fundamental Organic Chemistry and Lab
4 credit(s) 6 period(s) lecture & lab
LEC: Chemistry of representative groups of organic compounds, emphasizing biological applications. Prerequisites: (CHM130 and CHM130LL), or (CHM151 and CHM151LL). LAB: Laboratory experience in support of CHM230. Prerequisites: (CHM130 and CHM130LL), or (CHM150 or CHM151 and CHM151LL). Completion of (CHM130 and CHM130LL) or (CHM150 or CHM151 and CHM151LL) within the last two years recommended. Course Note: CHM230 course content is designed to meet the needs of students in such areas as agriculture, home economics, nursing, pre-physician assistant, and physical education, among others.

CHM235 and 235LL SUN+ CHM2235
General Organic Chemistry I and Lab
4 credit(s) 7 period(s) lecture & lab
(Fall only)
LEC: Rigorous introduction to chemistry of carbon-containing compounds. Reaction mechanisms and recent methods of synthesis emphasized. Prerequisites: CHM152 and CHM152LL, or CHM154 and CHM154LL. Completion of (CHM152 and CHM152LL) or (CHM154 and CHM154LL) within the last two years recommended. LAB: Laboratory experience in support of CHM235. Prerequisites: CHM152LL, or CHM154LL, or equivalent. Prerequisites or Corequisites: CHM235.

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CHM236 and 236LL
General Organic Chemistry IIA and Lab
4 credit(s) 7 period(s) lecture & lab
(Spring only)
LEC: Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized. Prerequisites: CHM235 and CHM235LL. Completion of CHM235 and CHM235LL within the last two years recommended. LAB: Laboratory experience in support of CHM236. Prerequisites: CHM235LL or equivalent. Prerequisites or Corequisites: CHM236.

CHM238 and 238LL
General Organic Chemistry IIB and Lab
5 credit(s) 9 period(s) lecture & lab
(Spring only)
LEC: Alternate to CHM236. Study of chemistry of carbon-containing compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized. Recommended for chemistry, chemical engineering and mining engineering majors. Prerequisites: CHM235 and CHM235LL or equivalent. LAB: Laboratory experience in support of CHM238. Prerequisites: CHM235LL or equivalent. Prerequisites or Corequisites: CHM238.

CHM298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

CIS – Computer Information Systems

CIS105
Survey of Computer Information
Systems
3 credit(s) 4 period(s) lecture + lab
Overview of computer technology, concepts, terminology, and the role of computers in business and society. Discussion of social and ethical issues related to computers. Use of word processing, spreadsheet, database, and presentation software. Includes uses of application software and the Internet for efficient and effective problem solving. Exploration of relevant emerging technologies. Prerequisites: None.

CIS/BPC114AE
Excel: Level I
1 credit(s) 2 period(s) lecture + lab
Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting and projections. Prerequisites: None.

CIS/BPC114BE
Excel: Level II
1 credit(s) 2 period(s) lecture + lab
Additional Excel spreadsheet techniques, including macro programming, database searching, extraction, and linking to obtain prescribed reports and graphs. Prerequisites: CIS/BPC114AE or permission of instructor.

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CIS/BPC114CE
Excel: Level III
1 credit(s) 1 period(s) lecture + lab
Additional Excel spreadsheet techniques, including complex macros, statistics, and matrix manipulation. Project design using multiple, integrated spreadsheets. Prerequisites: CIS/BPC114BE or permission of instructor.

CIS/BPC114DE
Excel Spreadsheet
3 credit(s) 5 period(s) lecture + lab
Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, projections, macro programming, database searching, extraction, linking, statistics, and matrix manipulation. Production of graphs and reports. Project design using multiple, integrated spreadsheets. Prerequisites: None.

CIS/BPC117AM
Database Management: Microsoft Access – Level I
1 credit(s) 2 period(s) lecture + lab
Introduction to the basic elements of a current version of the Microsoft Access database management program, for casual and beginning users. Prerequisites: None.

CIS/BPC117BM
Database Management: Microsoft Access – Level II
1 credit(s) 2 period(s) lecture + lab
Exploration of additional components of the Microsoft Access database management program. Prerequisites: BPC117AM or CIS117AM or permission of instructor.

CIS/BPC117CM
Database Management: Microsoft Access – Level III
1 credit(s) 1 period(s) lecture + lab
Application of the features of the Microsoft Access program to some common database management problems. Prerequisites: BPC117BM or CIS117BM.

CIS/BPC117DM
Microsoft Access: Database Management
3 credit(s) 5 period(s) lecture + lab
Introduction to the basic elements, exploration of additional components and common database management problems related to the Microsoft Access program. Prerequisites: None. Course Note: Combines the contents of BPC/CIS117AM and BPC/CIS117BM and BPC/CIS117CM.

CIS/BPC118AB
PowerPoint: Level I
1 credit(s) 2 period(s) lecture + lab
Use of PowerPoint software to produce professional-quality presentation visuals. Prerequisites: None.

CIS/BPC120AF
Computer Graphics: Adobe Photoshop: Level I
1 credit(s) 2 period(s) lecture + lab
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Basic foundation course in the use of electronic techniques to select, manipulate, and edit images, for graphic design and image correction. Prerequisites: None.
CIS/BPC120BF
Computer Graphics: Adobe Photoshop: Level II
1 credit(s) 1 period(s) lecture + lab
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Includes working with masks, channels and layers, and combining raster and vector graphics. Prerequisites: BPC/CIS120AF.

CIS/BPC120CF
Computer Graphics: Adobe Photoshop: Level III
1 credit(s) 1 period(s) lecture + lab
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Includes color printing, color management, creation of graphics for the Web. Prerequisites: BPC/CIS120BF.

CIS/BPC120DC
Flash: Digital Animation
3 credit(s) 4 period(s) lecture + lab
Provides students with the ability to use Flash graphics software on microcomputers. Covers basic animation techniques used in the creation, manipulation, and editing of Flash animation graphics. Prerequisites: None.

CIS/BPC120DF
Computer Graphics: Adobe Photoshop
3 credit(s) 4 period(s) lecture + lab
Provides students with the capability to use Adobe Photoshop graphics software on a computer. Basic foundation course in the use of electronic techniques to select, manipulate, and edit images, work with masks, channels and layers; combine raster and vector graphics; print in color, manage color, and create graphics for the web. Prerequisites: None.

CIS/BPC121AB
Microsoft Command Line Operations
1 credit(s) 2 period(s) lecture + lab
Use of the Microsoft command line interface: basic concepts, internal and external commands, subdirectories, and editor. Prerequisites: None.

CIS/BPC121AE
Windows Operating System: Level I
1 credit(s) 2 period(s) lecture + lab
Specific topics include Windows basics, navigating and customizing the desktop, maintaining hardware and software, improving performance, configurations, securing your computer, taskbar, organizing, searching and managing folders and files, installing and uninstalling applications, Internet Explorer fine tuning, security, and searching, including advanced search techniques, keyboard shortcuts, and current topics. Prerequisites: None.

CIS/BPC121AG
Windows 98 - Level I
1 credit(s) 2 period(s) lecture + lab
Specific topics include booting and shutting down the computer, navigating the desktop, start button features, taskbar status, and receiving on-line help support. Exploring and managing folders and files, running programs, and learning about Wordpad and Paint application programs. Prerequisites: None.

CIS/BPC122AE
Windows Operating System: Level II
1 credit(s) 2 period(s) lecture + lab
Additional capabilities of the Windows '95 program that configure devices and customize the presentation of the operating system. System tools, control panel utilities, the My Computer, Network Neighborhood, and Microsoft Exchange desktop icons. Other helpful utilities presented. Prerequisites: BPC/CIS121AE or permission of instructor.
CIS/BPC122AG  
Windows 98 - Level II  
1 credit(s) 2 period(s) lecture + lab  
Microsoft (MS) Windows 98 network software package. Covers enhanced features, user interface enhancements, maintenance and troubleshooting tools. Configuration emphasized. Pre-requisites: BPC121AG or CIS121AG.

CIS124AA  
Project Management Software: Level I  
1 credit(s) 1.7 period(s) lecture + lab  
Utilization of Project Management software packages by managers and advanced business students to solve critical management planning tasks. Evaluation of management opportunities utilizing software packages to monitor project progress and resource allocation. Includes "what-if" analysis, and preparation of management reports. Prerequisites: Permission of instructor or department.

CIS124BA  
Project Management Software: Level II  
1 credit(s) 1.7 period(s) lecture + lab  
Advanced use of project management software. Covers features and functions to solve critical management planning tasks. Project communications, scheduling, resource allocation, tracking processes and importing and exporting data also covered. Project consolidation emphasized. Prerequisites: CIS124AA or permission of instructor.

CIS126AA  
UNIX Operating System: Level I  
1 credit(s) 2 period(s) lecture + lab  
Use of the UNIX operating system: system components, built-in commands, files and directories, editors, and UNIX Shell and command lines. Prerequisites: None.

CIS126DA  
UNIX Operating System  
3 credit(s) 4 period(s) lecture + lab  
Use of a UNIX operating system including system components, built-in commands, files, and directories, editors, and UNIX shell and command lines. Installation, configuration, and maintenance of a UNIX operating system. Create scripts and batch files, and maintain system communications. Prerequisites: None.

CIS126DL  
Linux Operating System  
3 credit(s) 4 period(s) lecture + lab  
Introduction to the Linux Operating system. Develop knowledge and skills required to install, configure and troubleshoot a Linux-based workstation including basic network functions. Learn basic command line and Graphical User Interface (GUI) desktop environment utilities and applications. Fundamental abilities to achieve the entry-level industry certification covered. Prerequisites: None.

CIS/BPC133AA  
Internet/Web Development Level I-A  
1 credit(s) 2 period(s) lecture + lab  
Overview of the Internet and its resources. Hands-on experience with various Internet communication tools. Prerequisites: None.

CIS/BPC133BA  
Internet/Web Development Level I-B  
1 credit(s) 1 period(s) lecture + lab  
Exploration of additional Internet resources. Hands-on experience with a variety of resource discovery and information retrieval tools as well as enhancement of Web pages. Prerequisites: BPC/CIS133AA.

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CIS/BPC133CA
Internet/Web Development Level I-C
1 credit(s) 1 period(s) lecture + lab
Web site development using the enhancement codes. Includes frames, style sheets and javascript as well as design principles and typography. **Prerequisites:** BPC/CIS133BA or permission of instructor.

CIS/BPC133DA
Internet/Web Development Level I
3 credit(s) 4 period(s) lecture + lab
Overview of the Internet and its resources. Hands-on experience with various Internet communication, resource discovery and information retrieval tools. **Prerequisites:** None.

CIS150
Programming Fundamentals
3 credit(s) 4 period(s) lecture + lab
Structured program design and logic tools. Use of computer problems to demonstrate and teach concepts using appropriate programming language. **Prerequisites:** CIS105, or permission of instructor.

CIS150AB
Object-Oriented Programming Fundamentals
3 credit(s) 4 period(s) lecture + lab
Structured and Object-Oriented design and logic tools. Use of computer problems to demonstrate and teach concepts using an appropriate programming language. **Prerequisites:** CIS105 or permission of instructor.

CIS159
Visual Basic Programming I
3 credit(s) 4 period(s) lecture + lab
Use of the Visual Basic programming language to solve problems using suitable examples from business or other disciplines. **Prerequisites:** CIS105, or permission of instructor.

CIS162AC
Visual C++: Level I
3 credit(s) 4 period(s) lecture + lab
Beginning C programming. Includes features needed to construct programs, functions, pointers, input and output options, data types, structures, and unions, and disk file operations. **Prerequisites:** CIS105, or permission of instructor.

CIS162AD
C#: Level I
3 credit(s) 4 period(s) lecture + lab
Introduction to C# programming including general concepts, program design, development, data types, operators, expressions, flow control, functions, classes, input and output operations, debugging, structured programming, and object-oriented programming. **Prerequisites:** CIS105, or permission of instructor.

CIS166
Web Scripting/Programming
3 credit(s) 4 period(s) lecture + lab
Software development for Web sites, including client-side script and Common Gateway Interface (CGI) scripting. Covers Web-based transaction processing and use of databases in conjunction with the Web. Includes security issues. **Prerequisites:** CIS133CA or CIS133DA or permission of instructor.

CIS166AA
Introduction to JavaScripting
3 credit(s) 4 period(s) lecture + lab
Introduction to basic JavaScript programming concepts including syntax. Covers Hypertext Markup Language (HTML), programming logic and debugging, as well as forms manipulation and animation. **Prerequisites:** CIS133CA or CIS133DA or permission of instructor.

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CIS166AB
Web Scripting with Perl/CGI
3 credit(s) 4 period(s) lecture + lab
Introduction to basic server-side programming using the common gateway interface (CGI) with the Perl programming language. Covers basic form development programming logic, Structured Query Language (SQL) and the Perl Database Interface (DBI) and CGI modules. Prerequisites: CIS133CA or CIS133DA or permission of instructor.

CIS166AC
Web Scripting with Active Server Pages (ASP).NET
3 credit(s) 4 period(s) lecture + lab
Introduction to web scripting using Microsoft's ASP.Net (Active Server Pages). Web application development using Hypertext Markup Language (HTML), ASP.Net Web Forms, programming logic, and Structured Query Language (SQL). Prerequisites: (CIS133CA or CIS133DA) and (CIS162AD) or permission of instructor.

CIS166AD
Web Scripting with Java Server Pages (JSP)
3 credit(s) 4 period(s) lecture + lab
Introduction to web scripting using JSP (Java Server Pages). Web application development using Hypertext Markup Language (HTML), JSP, programming logic, and Structured Query Language (SQL). Prerequisites: (CIS133CA or CIS133DA) and CIS163AA or permission of instructor.

CIS166AE
Web Scripting with PHP: Hypertext Preprocessor (PHP)
3 credit(s) 4 period(s) lecture + lab
Introduction to web scripting with PHP (PHP: Hypertext Preprocessor). Web application development using Hypertext Markup Language (HTML), PHP, programming logic, and Structured Query Language (SQL). Prerequisites: CIS133CA or CIS133DA or permission of instructor.

CIS183AA
Microsoft Works
3 credit(s) 4 period(s) lecture + lab
Utilization of the Microsoft Works integrated software program. Utilizing electronic spreadsheet, word processing, data base, telecommunication, and graphics components to solve business problems. Prerequisites: None.

CIS190
Introduction to Local Area Networks
3 credit(s) 4 period(s) lecture + lab
Overview of local area networks. Emphasis on the elements of a local area network, current issues and products, and use of a local area network. Include terminology, hardware and software components, connectivity, resource monitoring and sharing, electronic mail and messaging, and security issues. Prerequisites: CIS105, or permission of instructor.

CIS/BPC224
Project Management Microsoft Project for Windows
3 credit(s) 4 period(s) lecture + lab
Introduction to project management concepts while working with MS Project to solve complex project management networks, including creating Gantt and PERT charts, tracking project progress, planning for restrictions, and integrating MS Project with other software packages such as Excel, Word, Powerpoint, and cc Mail. Prerequisites: None.

CIS225
Business Systems Analysis and Design
3 credit(s) 4 period(s) lecture + lab
Investigation, analysis, design, implementation and evaluation of business computer systems. Prerequisites: Any programming language or permission of Instructor.

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Revised: 9/2/2011; 10/28/11; 12/7/11
CIS225AB
Object-Oriented Analysis and Design
3 credit(s) 4 period(s) lecture + lab
Methodologies and notations for fundamental object-oriented analysis and design including use cases, objects, classes, stereotypes, and relationships. Object-oriented iterative process for system development. A continuous application development exercise for applying the analysis and design concepts. Prerequisites: Any program language, or permission of instructor.

CIS233DA
Internet/Web Development Level II
3 credit(s) 4 period(s) lecture + lab
Design and create pages on the World Wide Web with a variety of markup languages, programming languages, scripts, and multimedia. Hands-on experience authoring and preparing sophisticated web documents. Exploration of best practices/issues for web design and publishing and careers in web development and e-commerce. Prerequisites: BPC/CIS133CA or BPC/CIS133DA or permission of instructor.

CIS234
XML Application Development
3 credit(s) 4 period(s) lecture + lab
The use of Extensible Markup Language (XML) to make documents smarter, simplify Web automation, and to communicate between databases, both within and between corporations. Includes techniques for XML generation, data extraction and sharing, and transformation and managing of XML files. Prerequisites: CIS133CA or CIS133DA, or permission of the Instructor.

CIS235
e-Commerce
3 credit(s) 4 period(s) lecture + lab
Introduction to Electronic Commerce on the Internet. Designing an electronic storefront including web page content and development, e-commerce site marketing, advertisement, legal and security considerations, credit card and other debit transaction covered. Also includes current issues in e-commerce. Prerequisites: CIS133CA, or CIS133DA, or permission of instructor.

CIS236
Web-Based Teaching and Learning I
2 credit(s) 3 period(s) lecture + lab
Experience using a web-based learning environment from an online student’s perspective. Use communication tools, submit assignments, use evaluation tools, create homepages, and navigate online-learning environment. Introduction to basics of online pedagogy. Hands-on experience with a web-based learning environment. Prerequisites: CIS133CA or CIS133DA, or permission of instructor.

CIS237
Web-Based Teaching and Learning II
2 credit(s) 3 period(s) lecture + lab
Create an online or hybrid course using a web-based learning environment. Create, prepare, and manage content and resource files; locate and add resources; and manage a course homepage. Add, delete, and revise tools; create, maintain, and release quizzes and assignments; and manage a course. Track students, data, and revise student grades, submissions, and attendance. Hands-on experience with creating a course using a web-based learning environment. Prerequisites: CIS236, or permission of instructor.

CIS240
Local Area Network Planning and Design
3 credit(s) 3 period(s) lecture
Analysis of the needs and requirements for a local area network. Emphasis on basic systems analysis and design for a local area network, selection of appropriate hardware and software components. Concepts to be covered include current and future issues, needs analysis, cost estimation, selection of connectivity and network components, and issues relating to access, security, and support. Prerequisites: CIS190 or MST140 or permission of instructor.

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Revised: 9/2/2011; 10/28/11; 12/7/11
CIS250
Management of Information Systems
3 credit(s) 4 period(s) lecture
The study of business information systems and its management, communication, e-business strategies, emerging technologies, database concepts, and project management. Overview of systems analysis and design. Learn about the competitive and strategic uses of information systems and how they are transforming organizations and their management. **Prerequisites:** CIS105.

CIS259
Visual Basic Programming II
3 credit(s) 4 period(s) lecture
Use of the Visual Basic programming language to identify and solve advanced problems using suitable examples from business or other disciplines. **Prerequisites:** CIS159 or permission of instructor.

CIS262
C Programming II
3 credit(s) 4 period(s) lecture + lab
Advanced level C programming. Programming with emphasis on data management, dynamic allocation, varied memory models, interfacing with the operating system, efficiency, and advanced debugging techniques. **Prerequisites:** CIS162 or permission of instructor.

CIS262AA
C: Level II
3 credit(s) 4 period(s) lecture + lab
Advanced level C programming. Programming with emphasis on data management, dynamic allocation, varied memory models, interfacing with the operating system, efficiency, and advanced debugging techniques. **Prerequisites:** CIS162AA, or permission of instructor.

CIS262AB
C++ Level II
3 credit(s) 4 period(s) lecture + lab
Advanced level C++ programming with emphasis on arrays, data management, dynamic memory allocation, object-oriented programming concepts, input/output operations, libraries, and debugging techniques. Includes overview of other advanced applications of C++. **Prerequisites:** Permission of instructor.

CIS262AC
Visual C++: Level II
3 credit(s) 4 period(s) lecture + lab
Advanced-level C programming. Programming with emphasis on data management, dynamic allocation, varied memory models, interfacing with the operating system, efficiency, and advanced debugging techniques. **Prerequisites:** CIS162AC, or permission of instructor.

CIS263AA
Java Programming: Level II
3 credit(s) 4 period(s) lecture + lab
Intermediate Java programming. Includes features needed to construct object-oriented programming, multithreading, multimedia, files, streams and data structure. **Prerequisites:** CIS163AA or permission of the instructor.

CIS290AA, AB, and AC
Computer Information Systems Internship
1, 2, and 3 credit(s) 6, 12, and 18 period(s) lab
Work experience in business or industry. **Prerequisites:** Permission of instructor.

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Revised: 9/2/2011; 10/28/11; 12/7/11
CIS 298AA, AB, and AC
Special Projects
1, 2, and 3 credit(s) 1, 2, and 3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

CNS – Construction

CNS 101
Construction and Culture
3 credit(s) 3 period(s) lecture
The cultural context of construction, emphasizing the evolution and expansion of constructed environments as expressions of ethical and historical value systems. Prerequisites: None.

COM – Communication

COM 100
Intro to Human Communication
3 credit(s) 3 period(s) lecture
Theory and practice of communication skills in public, small group, and interpersonal settings. Includes study of the speech communication process. Prerequisites: None.

COM 110
Interpersonal Communication
3 credit(s) 3 period(s) lecture
Theory and practice of communication skills which affect day-to-day interactions with other persons. Topics may include using verbal and nonverbal symbols, interactive listening, resolving interpersonal conflict, developing and maintaining personal and professional relationships. Prerequisites: None.

COM 120
Pronunciation of American Speech
3 credit(s) 3 period(s) lecture
Analysis of American speech production problems due to accents produced by another language, correction of misarticulated American speech sounds, critical listening to sound production, understanding American English speech patterns, practicing American idioms and expressions, and preparing and delivering group and individual speech presentations. Prerequisites: None.

COM 225
Public Speaking
3 credit(s) 3 period(s) lecture
Designed to enhance the student's ability to present public speeches confidently and competently. Also designed to improve information literacy and critical thinking skills. Prerequisites: ENG 101 or ENG 107, or equivalent.

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COM230
Small Group Communication
3 credit(s) 3 period(s) lecture
Principles and processes of small groups and development of skills for participation and leadership in small group settings. Practice in problem solving, decision making, and information sharing. **Prerequisites:** None.

COM/THP241
Oral Interpretation of Literature
3 credit(s) 3 period(s) lecture
The study, analysis, and preparation for performance of prose, poetry, and dramatic literature. Preparation of material for public audiences. **Prerequisites:** ENG101 or ENG107.

COM259
Communication in Business and Professions
3 credit(s) 3 period(s) lecture
Interpersonal, group, and public communication in business and professional organizations. Emphasis on oral communication. **Prerequisites:** ENG101 or ENG107 or equivalent.

COM/THP271
Voice and Diction
3 credit(s) 3 period(s) lecture
Exercises and techniques to free the voice and improve projection, resonance, and articulation. Covers international phonetic alphabet and standard stage speech. **Prerequisites:** None.

COM281
Communication Activities
1 credit(s) 3 period(s) lecture + lab
Designed to provide students with competence and confidence in a variety of speech situations beyond the classroom setting. May include presentations to service organizations and/or competition at other colleges and universities. **Prerequisites:** None.

COM298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. **Prerequisites:** None.

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**CPD – Counseling and Personal Development**

**CPD100**
Orientation for Student Development
1 credit(s) 1 period(s) lecture
Offered to orient new students to college life. Emphasis on assessing students’ academic potential, facilitating curricular advisement and registration procedures, learning academic survival skills, and becoming aware of all services available to students on campus and in the community. **Prerequisites:** None.

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CPD101
Personal Development
2 credit(s) 2 period(s) lecture
Designed to assist students in developing confidence in making personal, social, and educational decisions. Examination and assessment of individual needs, interests, abilities, and values to develop and strengthen interpersonal communication, enhance transitional skills, and identify realistic life planning goals. **Prerequisites:** None.

CPD102 Counseling Topics
Counseling courses offered as special topics for students. Emphasis on skill development in areas of personal concern.

CPD102AA
Assertiveness Training
2 credit(s) 2 period(s) lecture
Designed to help students differentiate assertive, non-assertive and aggressive behavior, overcome blocks to acting assertively, establish boundaries, and develop effective verbal and nonverbal assertive behavior. Group discussion, role playing, and videotape feedback are used to enable students to express feelings, beliefs, and opinions in a direct, appropriate manner. **Prerequisites:** None.

CPD102AB
Career Exploration
2 credit(s) 2 period(s) lecture
Designed to assist students make informed career decisions. Focuses on current occupational trends and outlook. Explores career-related interests, values, needs, preferences, skills, and strengths with the use of various assessments. Aids in the development of individualized educational/career goals and action plan. **Prerequisites:** None. **Course Notes:** CPD102AB may be repeated for a total of six (6) credit hours.

CPD102AD
Eliminating Self-Defeating Behavior
2 credit(s) 2 period(s) lecture
Designed to help students change behaviors that work against their potential, i.e., inferior feelings, shyness, nervousness, stage fright, underachievement, etc. Focus on identifying undesirable thoughts, emotions and behaviors, for the purpose of developing alternative, and more desirable thoughts, emotions, and behaviors. **Prerequisites:** None.

CPD102AH
Stress Management
2 credit(s) 2 period(s) lecture
Reviews the sources of stress, the physiological effects and the psychological impact of stress on the individual. Provides strategies to reduce stress. **Prerequisites:** None.

CPD102AN
Anger Management
2 credit(s) 2 period(s) lecture
Provides an understanding of the emotion of anger, explores the types, origins and typical reactions to anger. Covers stress and the need for stress management in relation to anger. Examines personal anger patterns and feelings, and the use of effective interpersonal communications in effective anger management. **Prerequisites:** None.

CPD102AR
Relaxation Training
1 credit(s) 1 period(s) lecture
Emphasis on specific relaxation techniques to alleviate dysfunctional tension. Use of progressive relaxation methods to reduce stress. Discussion of other modalities of relaxation. **Prerequisites:** Permission of instructor.

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CPD102AS  
Conflict Resolution  
2 credit(s) 2 period(s) lecture  
Developing new skills for dealing effectively with everyday conflict and improving quality of one’s own life. Opportunity to discuss issues and seek cooperative resolutions. **Prerequisites:** None.

CPD102AT  
Building Self-Esteem  
2 credit(s) 2 period(s) lecture  
Practice in specific methods for building and keeping self-esteem. Personal assessment of attitudes, values, support systems, and goals. **Prerequisites:** None.

CPD103 Counseling Groups  
Counseling courses offered to meet the needs of special groups of students. Emphasis on self-assessment to increase students’ confidence and potential.

CPD103BA  
Women in Transition  
2 credit(s) 2 period(s) lecture  
Designed to assist and support women who are experiencing life transitions. Emphasis on assessing self-potential, increasing self-confidence, managing life change, and exploring educational/career/life options in terms of the realities of roles for women today. **Prerequisites:** None.

CPD103BC  
African American Cultural Pride and Awareness  
2 credit(s) 2 period(s) lecture  
Develop an awareness of cultural roots, history, and traditions with emphasis on the shaping of personal identity, social, career, and educational decisions. **Prerequisites:** None.

CPD103BD  
Latino/Hispanic American Pride and Awareness  
2 credit(s) 2 period(s) lecture  
Develop an awareness of cultural roots, history, and traditions with emphasis on the shaping of personal identity, social, career, and educational decisions. **Prerequisites:** None.

CPD103BE  
Native American Cultural Pride and Awareness  
2 credit(s) 2 period(s) lecture  
Develop an awareness of cultural roots, history, and traditions with emphasis on the shaping of personal identity, social, career, and educational decisions. **Prerequisites:** None.

CPD104  
Career and Personal Development  
3 credit(s) 3 period(s) lecture  
An overview of the process of career/life planning through self-awareness and understanding. Focus on specific skill development such as dealing with change, decision making, goal setting and understanding lifestyles. Provides opportunity to evaluate interests, skills and values. Emphasis on the development of a comprehensive career search process which includes current occupational information, specific tools for researching the job market and acquiring employment. **Prerequisites:** None.

CPD108  
Personal Money Management for College Students  
1 credit(s) 1 period(s) lecture  
Designed to assist students in examining values related to spending, borrowing and saving money. Identify financial priorities and responsibilities associated with debt. Develop and follow a personal budget plan and learn strategies for maintaining a financially balanced personal life. **Prerequisites:** None.

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CPD/AAA115
Creating College Success
1 credit(s) 1 period(s) lecture
Strategies to create success in college. Methods for selecting and developing effective academic strategies, increasing self-awareness and developing self-management strategies. Elements of college resources and relationships with others explored in support of students' educational experience. Prerequisites: None.

CPD/GBS126
Writing Resumes
1 credit(s) 1.7 period(s) lecture + lab
Planning, organizing, and writing a professional resume. Focus on presentation skills including format and language. Prerequisites: None.

CPD/AAA150
Strategies for College Success
3 credit(s) 3 period(s) lecture
Focus on increasing student success through college orientation and personal growth, study skills development, and educational and career planning. Prerequisites: None.

CPD160
Introduction to Multiculturalism
3 credit(s) 3 period(s) lecture
Examination of the multiple cultures and subcultures within the contemporary United States. Personal exploration of awareness and appreciation of multiculturalism. Activities for experiencing diverse cultural perspectives. Skills for recognizing, analyzing, and mediating cultural and psychological factors impacting conflict and accord between diverse cultures. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. Prerequisites: None.

CRE – Critical Reading

Please Note: For additional Reading courses, see RDG, starting on page 216.

CRE101
College Critical Reading
3 credit(s) 3 period(s) lecture
Emphasis on applying critical inquiry skills to varied and challenging reading materials. Includes analysis, synthesis, and evaluation through written discourse. Prerequisites: (ENG101 or ENG107) and (appropriate reading placement score or grade of "C" or better in RDG091.)

CRW – Creative Writing

CRW120
Introduction to Writing
Children's Literature
3 credit(s) 3 period(s) lecture
Overview of writing children's literature. Emphasis on genres and standards for quality. Development of techniques in reading, evaluating, writing, revising, and editing literature written for children. Prerequisites: None. ENH291 suggested but not required.

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CRW150
Introduction to Creative Writing
3 credit(s) 3 period(s) lecture
Introduces the student to elements and techniques of creative writing in a variety of genres; teaches terminology and concepts needed for successful participation in writing workshops; facilitates writing practice and evaluation; offers individual guidance on the student’s development as a writer. Prerequisites: None.

CRW155
Bilingual Creative Writing
3 credit(s) 3 period(s) lecture
Introduction to bilingual creative writing. Examines the elements of writing bilingual literature, including authorial voice and aesthetic, and the role of culture, ethnicity, and dialect. Writing, analysis, evaluation, and revision of creative writing generated from a bilingual/bicultural perspective. Prerequisites: None.

CRW160
Introduction to Writing Poetry
3 credit(s) 3 period(s) lecture
Prewriting (invention and discovery); writing; analyzing and evaluating (in workshop); and revising to practice manipulating various elements of poetry, critique one's own and the poetry of others, and produce a portfolio of finished, marketable poems. Prerequisites: None. CRW150 recommended but not required.

CRW170
Introduction to Writing Fiction
3 credit(s) 3 period(s) lecture
Practice in writing fiction through a process of prewriting (invention and discovery), writing, analysis and evaluation (in workshop), and revision; practice in manipulating various elements and forms of fiction; production of marketable quality short fiction. Prerequisites: None. CRW150 recommended but not required.

CRW172
Introduction to Comic Book Writing
3 credit(s) 3 period(s) lecture
Introduction to elements and techniques of comic book writing in its specific form; teaches terminology and concepts needed for the successful participation in writing workshops; focuses on proposal outline, planning, structure facilitates writing practice (including character study) and evaluation; offers individual suggestions in the student’s development in this genre. Prerequisites: None.

CRW180
Introduction to Writing Nonfiction
3 credit(s) 3 period(s) lecture
Practice in writing creative nonfiction, including autobiography and biography, the essay, reviews, and humor using a process of invention and discovery, writing, analysis, evaluation, and revision. Combines lecture, discussion, and workshop, leading to the production of marketable quality creative nonfiction. Prerequisites: None. CRW150 recommended but not required.

CRW190
Introduction to Screenwriting
3 credit(s) 3 period(s) lecture
Overview of screenwriting elements; introduction to screenwriting techniques. Prerequisites: None. CRW150 recommended but not required.

CRW200
Readings for Writers
1 credit(s) 1 period(s) lab
Close analysis and interpretation of selected literary texts designed to strengthen the students’ own writing by extending their familiarity with the genre in which they write and their knowledge of selected literary elements. One-on-one meetings between student and instructor. Prerequisites: CRW150, or permission of Instructor. Course Notes: CRW200 may be repeated for a total of six (6) credits.

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CRW201
Portfolio
1 credit(s) 1 period(s) lab
Close analysis of the creative writing portfolio culminating in selection, revision, editing, and compiling of the student’s own literary work in a portfolio. Students meet individually with instructor to choose, prepare, and compile their work. **Prerequisites:** Acceptance into Creative Writing Certificate Program and completion of at least nine (9) credit hours in creative writing (CRW), or permission of Program Coordinator. **Course Note:** CRW201 may be repeated for a total of two (2) credit hours.

CRW202
The Writer As Witness
3 credit(s) 3 period(s) lecture
Studio course focusing on writing with the writer as witness of the world: prewriting, writing, analysis, evaluation, and writing of monologue and dialogue in various formats. **Prerequisites:** CRW150, or permission of instructor.

CRW203
Dialogue
3 credit(s) 3 period(s) lecture
Studio course focusing on writing dialogue in a variety of genres; prewriting, writing, analysis, evaluation, and revision of monologue and dialogue in various formats. **Prerequisites:** CRW150 or permission of instructor.

CRW204
Journaling
3 credit(s) 3 period(s) lecture
Studio course focusing on journal writing. **Prerequisites:** CRW150 or permission of instructor.

CRW220
Intermediate Writing
Children’s Literature
3 credit(s) 3 period(s) lecture
Application of techniques in writing literature for children. Emphasis on independent writing, self-evaluation, and revision. Includes completion of a major writing project of marketable quality. **Prerequisites:** CRW120, or permission of instructor.

CRW242AH
Writing Studio Workshop I:
Musical Elements of Poetry
3 credit(s) 3 period(s) lecture
Studio course focusing on the musical elements of poetry, including sounds and rhythms, rhyme, traditional rhetorical devices, line and stanza; examines relationship between the written and spoken poem; prewriting, writing, analysis, evaluation, and revision of poetry. **Prerequisites:** None.

CRW260
Intermediate Poetry Writing
3 credit(s) 3 period(s) lecture
Emphasis on writing a series of original poems; analysis and evaluation of the functions and effects of established works of poetry; concentration on evaluation and revising students’ poetry through intensive workshopping. **Prerequisites:** CRW160 or permission of instructor.

CRW261
Topics in Writing: Poetry
3 credit(s) 3 period(s) lecture
Analysis, writing, and revision of genre or element within poetry. **Prerequisites:** CRW150 or permission of instructor.

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CRW270
Intermediate Fiction Writing
3 credit(s) 3 period(s) lecture
Writing a series of original short stories; analysis of established works of fiction; concentration on revising students’ fiction through intensive workshopping. Prerequisites: CRW170 or permission of instructor.

CRW271
Topics in Writing: Fiction
3 credit(s) 3 period(s) lecture
Analysis, writing, and revision of genre or element within fiction. Prerequisites: CRW150 or permission of instructor.

CRW272
Planning and Structuring the Novel
3 credit(s) 3 period(s) lecture
Focus on planning, structuring, and beginning a novel; prewriting, writing, analysis, evaluation, and revision of novel plans and excerpts. Prerequisites: CRW150 or permission of instructor.

CRW273
Writing the Novel
3 credit(s) 3 period(s) lecture
Provides the beginning novelist with structure, support, and guidance vital to sustained writing; focus on establishing goals and using critique sessions with instructor and peers to draft a novel; open- and topic-focused in-class forums, novel writing, peer and instructor critiques. Prerequisites: CRW272 or permission of instructor.

CRW274
Revising the Novel
3 credit(s) 3 period(s) lecture
Studio course workshop format. Requires a complete novel finished, in manuscript, ready for revision and polishing. Prerequisites: CRW273 or permission of instructor.

CRW281
Topics in Writing: Non-Fiction
3 credit(s) 3 period(s) lecture
Analysis, writing, and revision of genre or element within non-fiction. Prerequisites: CRW150 or permission of instructor.

CRW290
Intermediate Screenwriting
3 credit(s) 3 period(s) lecture
Drafting and revision of original screenplay; overview of marketing a screenplay. Prerequisites: CRW190 or permission of instructor.

CRW291
Topics in Writing: Plays
3 credit(s) 3 period(s) lecture
Analysis, writing, and revision of genre or element within plays and/or motion picture screenplays. Prerequisites: CRW150 or permission of instructor.

CWE – Career Work Experience

CWE 198AA
Career/Work Experience
1 credit(s) 1 period(s) lecture & lab
Participation in a work experience, gaining on-the-job training, and/or exploring a career or field of choice. Helps students relate their education to the real work world. Resume writing and interviewing skills. Development of employability skills. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
DAE – Dental Assisting Education

DAE101
Preclinical Dental Assisting
2 credit(s) 2 period(s) lecture
Preclinical procedures in dentistry. Dental equipment operation and maintenance, infection control, sterilization, hazard control procedures, and four-handed concepts during clinical procedures. **Prerequisites:** Admission to the Dental Assisting Program or permission of instructor. **Corequisites:** DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, DAE/DHE204, or permission of instructor.

DAE102
Preclinical Dental Assisting Laboratory
1 credit(s) 3 period(s) lecture + lab
Practice of preclinical procedures including dental equipment operation and maintenance, infection and hazard control procedures, and four-handed dentistry concepts. **Prerequisites:** Admission to the Dental Assisting Program or permission of instructor. **Corequisites:** DAE101, DAE104, DAE106, DAE107, DAE/DHE114, DAE122, DAE/DHE203, DAE/DHE204, or permission of instructor.

DAE104
Preventive Dentistry
2 credit(s) 2 period(s) lecture
Educational and therapeutic techniques necessary for instructing diverse patients, nutritional counseling, fluorides, preventive dental procedures, development of individual programs, and techniques of patient motivation. **Prerequisites:** Admission to the Dental Assisting Program or permission of the instructor. **Corequisites:** DAE101, DAE102, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, DAE/DHE204, or permission of instructor.

DAE106
Clinical Dental Assisting
4 credit(s) 4 period(s) lecture
Dental Assisting profession's history, roles of the dental team members, ethical and legal standards. Operatory and patient preparation, assisting with General Dentistry and specialty procedures. Application of current concepts in Clinical Assisting. **Prerequisites:** Admission to the Dental Assisting Program or permission of instructor. **Corequisites:** DAE101, DAE102, DAE104, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, DAE/DHE204, or permission of instructor.

DAE107
Clinical Dental Assisting Laboratory
2 credit(s) 6 period(s) lab
Introduction to specialty dental practices. Clinical assisting with diagnosis, preparation of patient, and specialty procedures. **Prerequisites:** Admission to the Dental Assisting Program or permission of instructor. **Corequisites:** DAE101, DAE102, DAE104, DAE106, DAE/DHE114, DAE/DHE122, DAE/DHE203, DAE/DHE204, or permission of instructor.

DAE114
Emergency Medicine
2 credit(s) 2 period(s) lecture
Introduction to recording and interpreting medical history. Additional topics include: recognition of signs and symptoms of medical emergencies, procedures and techniques introduced to prevent emergencies and management of emergency situations in the dental environment. **Prerequisites:** Admission to the Dental Hygiene or Dental Assisting Programs.
DAE122
Dental Anatomy, Embryology
and Histology
2 credit(s) 3 period(s) lecture + lab
Includes the histology and embryology of oral tissues; developmental disturbances of the face, oral cavity, and related structures; tooth composition and morphology, eruption patterns and occlusal evaluation. Use of skulls, models and multi-media resources also covered. Prerequisites: Admission to the Dental Assisting or Dental Hygiene Programs.

DAE124
Dental Radiography
2 credit(s) 2 period(s) lecture
Physics of radiography, theory of radiation production, exposure techniques, radiation protection, film processing, mounting, and interpretation of radiographs. Course activities include multi-media resources. Prerequisites: (Admission to the Dental Assisting or Dental Hygiene Programs) or permission of instructor.

DAE131
Dental Radiography Laboratory
2 credit(s) 6 period(s) lab
Radiation safety and infection control procedures for operator and patient. Film placement, exposure, development, mounting, and evaluation of dental radiographs. Operation and maintenance of x-ray and processing equipment. Interpretation of radiographic findings. Prerequisites: Admission to the Dental Assisting Program, DAE/DHE122, or permission of the instructor. Corequisites: DAE/DHE124, or permission of instructor.

DAE140
Dental Issues Seminar
1 credit(s) 1 period(s) lecture

DAE144
Pharmacology
1 credit(s) 1 period(s) lecture
Study of the principles of pharmacology, regulatory agencies, classification, uses, administration, and protocol for handling drugs used in dentistry. Prerequisites: Admission to the Dental Assisting Program or permission of instructor, DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE203, DAE/DHE204 or permission of instructor. Corequisites: DAE/DHE124, DAE131, DAE140, DAE145, DAE151, DAE224, DAE225, DAE226, DAE227, DAE228, or permission of the instructor.

For additional information on PC program competencies, visit:
http://www.maricopa.edu/academic/ccta/curric/progpc.php

For additional information on MCCCD course competencies, visit:
http://www.maricopa.edu/academic/ccta/curric/cs.php

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DAE145
Oral Pathology
2 credit(s) 2 period(s) lecture
Emphasis on processes that are the basis of oral disease. Identifies the role of the Dental Assistant in the treatment of oral disease. Prerequisites: Admission to the Dental Assisting Program or permission of instructor, DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE203, DAE/DHE204 or permission of instructor. Corequisites: DAE/DHE124, DAE131, DAE140, DAE144, DAE145, DAE151, DAE224, DAE225, DAE226, DAE227, DAE228, or permission of the instructor.

DAE151
Survey of Dental Office Management
2 credit(s) 2 period(s) lecture
Basic business procedures and office management skills related to the dental practice. Prerequisites: DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, DAE/DHE204, or permission of instructor. Corequisites: DAE/DHE124, DAE131, DAE144, DAE145, DAE224, DAE225, DAE226, DAE227, DAE228, or permission of instructor.

DAE203
Dental Materials
2 credit(s) 2 period(s) lecture
Composition, properties and criteria for use of dental materials. Principles of mixing techniques of restorative, preventive, and laboratory dental materials. Prerequisites or Corequisites: (DHE117 and admission to the Dental Hygiene Program) or permission of Instructor.

DAE204
Dental Materials Laboratory
1 credit(s) 3 period(s) lab
Manipulate permanent and temporary restorative materials, impression material, dental waxes, cements, periodontal dressings, bases and liners. Fabricate mouth protectors, study models, and custom impression trays. Laboratory proficiency in margination of permanent restorative materials. Prerequisites: (Admission to the Dental Assisting or Dental Hygiene Programs) or permission of Instructor. Corequisites: DAE203.

DAE224
General Clinical Practice
1 credit(s) 5 period(s) lab
Placement of students in general practice dental facilities for supervised practical experience. Prerequisites: A grade of "C" or better in DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, and DAE/DHE204. Corequisites: DAE/DHE124, DAE131, DAE140, DAE144, DAE145, DAE151, DAE225, DAE226, DAE227, and DAE228.

DAE225
Pediatric Clinical Practice
1 credit(s) 5 period(s) lab
Placement of students in pediatric practice dental facilities for supervised practical experience. Prerequisites: A grade of "C" or better in DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, and DAE/DHE204. Corequisites: DAE/DHE124, DAE131, DAE140, DAE144, DAE145, DAE151, DAE224, DAE226, DAE227, and DAE228.

DAE226
Periodontal Clinical Practice
1 credit(s) 5 period(s) lab
Placement of students in periodontal practice dental facilities for supervised practical experience. Prerequisites: A grade of "C" or better in DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, and DAE/DHE204. Corequisites: DAE/DHE124, DAE131, DAE140, DAE144, DAE145, DAE151, DAE224, DAE225, DAE227, and DAE228.
DAE227
Orthodontic Clinical Practice
1 credit(s) 5 period(s) lab
Placement of students in orthodontic practice dental facilities for supervised practical experience. Prerequisites: A grade of "C" or better in DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, and DAE/DHE204, Corequisites: DAE/DHE124, DAE131, DAE140, DAE144, DAE145, DAE151, DAE224, DAE225 DAE226, and DAE228.

DAE228
Oral and Maxillofacial Surgery Clinical Practice
1 credit(s) 5 period(s) lab
Placement of students in oral and maxillofacial surgical facilities for supervised practical experience. Prerequisites: A grade of "C" or better in DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, and DAE/DHE204, Corequisites: DAE/DHE124, DAE131, DAE140, DAE144, DAE145, DAE151, DAE224, DAE225, DAE226, and DAE227.

DAE298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

DFT – Drafting Technology

DFT262
3D Architectural Animation
3 credit(s) 6 period(s) lecture + lab
Creation of 3D architectural animations. Includes sketches, storyboards, animation techniques, and portfolio development. Prerequisites: DFT122, DFT254AA, or permission of the department.

DHE – Dental Hygiene Education

DHE110
Pharmacology
3 credit(s) 3 period(s) lecture
Study of the principles of pharmacology and drugs affecting dental treatment. Topics include drug interactions, oral manifestations, drugs used in dentistry and complementary medicine. Prerequisites: Admission to the Dental Hygiene Program or permission of instructor.

DHE112
Oral Pathology
3 credit(s) 3 period(s) lecture
Identification, classification, etiology and treatment of lesions of the oral mucosa and atypical conditions of the oral cavity and supporting structures. Understanding of abnormal conditions to recognize the parameters of comprehensive dental hygiene care. Multi-media resources are used extensively for identification of oral lesions. Prerequisites: Admission to the Dental Hygiene Program or permission of instructor.

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DHE115
Emergency Medicine
2 credit(s) 2 period(s) lecture
Introduction to recording and interpreting medical history. Additional topics include: recognition of signs and symptoms of medical emergencies, procedures and techniques introduced to prevent emergencies and management of emergency situations in the dental environment. Prerequisites: Admission to the Dental Hygiene Program.

DHE117
Dental Radiography
2 credit(s) 2 period(s) lecture
Physics of radiography, theory of radiation production, exposure techniques, radiation protection, film processing, mounting, and interpretation of radiographs. Course activities include multi-media resources. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

DHE119
Head and Neck Anatomy
3 credit(s) 3 period(s) lecture
Study of the structures of the head and neck relevant to dental hygiene. Topics include: osteology, musculature, blood supply, glandular tissue, cranial nerves and routes of infection. Course activities include use of skulls, models and multi-media resources. Prerequisites: Admission to the Dental Hygiene Program or permission of instructor.

DHE120
Pre-Clinical Dental Hygiene
6 credit(s) 12 period(s) lecture + lab
Introduction to the dental hygiene profession and the process of care. Infection control, patient assessment, preventive treatment and dental hygiene instrumentation are practiced. Students are introduced to self assessment skills and quality improvement. Prerequisites: Admission to the Dental Hygiene Program or permission of instructor.

DHE121
Dental Anatomy, Embryology and Histology
2 credit(s) 3 period(s) lecture + lab
Includes the histology and embryology of oral tissues; developmental disturbances of the face, oral cavity, and related structures; tooth composition and morphology; eruption patterns and occlusal evaluation. Use of skulls, models and multi-media resources also covered. Prerequisites: Admission to the Dental Hygiene Program.

DHE125
Dental Radiography Laboratory
1 credit(s) 3 period(s) lab
Radiation safety and infection control procedures for operator and patient. Film placement, exposure, development, mounting and evaluation of dental radiographs. Operation and maintenance of X-ray and processing equipment. Interpretation of radiographic findings. Prerequisites or Corequisites: DHE117 and admission to the Dental Hygiene Program or permission of Instructor.

DHE127
Prevention of Dental Disease
3 credit(s) 3 period(s) lecture
Introduction of preventive concepts to help clients achieve control of oral diseases and injury. Topics include etiologic agents, caries process, nutrition, fluorides, sealants and patient/client motivation techniques. Multi-media resources used extensively. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor.

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DHE132
Dental Hygiene Theory I
3 credit(s) 5 period(s) lecture + lab
Continued study of the dental hygiene process of care with emphasis on assessment, planning and implementation. Topics include instrumentation, adjunct dental hygiene services, instrument sharpening, computer technology, dental specialties and professional accountability. Prerequisites: DHE120 and admission to the Dental Hygiene Program or permission of instructor. Corequisites: DHE133.

DHE133
Dental Hygiene Clinic I
3 credit(s) 9 period(s) lab
Application of the dental hygiene process of care with emphasis on assessment, planning, and implementation. Introduction to evaluation of dental hygiene therapy. Prerequisites: DHE120 and admission to the Dental Hygiene Program. Corequisites: DHE132 and current CPR card.

DHE201
Dental Materials
2 credit(s) 2 period(s) lecture

DHE202
Dental Materials Laboratory
1 credit(s) 3 period(s) lab
Manipulate permanent and temporary restorative materials, impression material, dental waxes, cements, periodontal dressings, bases and liners. Fabricate mouth protectors, study models, and custom impression trays. Laboratory proficiency in margination of permanent restorative materials. Prerequisites: Admission to the Dental Hygiene Program or permission of Instructor. Corequisites: DHE201.

DHE212
Dental Hygiene Theory II
2 credit(s) 2 period(s) lecture
Study of the dental hygiene process of care with emphasis on comprehensive care planning, case presentation, and clinical decision making. Introduction to advanced periodontal instrumentation. Prerequisites: DHE132 and DHE133 and admission to the Dental Hygiene Program. Corequisites: DHE213.

DHE213
Dental Hygiene Clinic II
5 credit(s) 15 period(s) lab
Application of the dental hygiene process of care with emphasis on comprehensive care planning, case presentation, clinical decision making, advanced instrumentation and improved time utilization. Prerequisites: DHE132 and DHE133 and admission to the Dental Hygiene Program. Corequisites: DHE212.

DHE219
Practice Management
2 credit(s) 2 period(s) lecture
Integration of practice management concepts and comprehensive quality patient care in preparation for future collaborative practice between dental hygienists and dentists. Students are challenged with practice situations including productivity, conflict management, ethical and legal issues. Prerequisites: Admission to the Dental Hygiene Program or permission of instructor.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit(s)</th>
<th>Period(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHE225</td>
<td>Periodontics</td>
<td>3</td>
<td>3</td>
<td>Principles of periodontology; etiology, microbiology, pathogenesis, classification and characteristics of healthy and diseased periodontal tissues. Surgical treatment of periodontal disease and the effects of dental hygiene therapy, surgical techniques and maintenance therapy. Evaluation of the scientific literature and multi-media resources are used extensively. <strong>Prerequisites:</strong> Admission to the Dental Hygiene Program or permission of instructor.</td>
</tr>
<tr>
<td>DHE227</td>
<td>Dental Anesthesia</td>
<td>2</td>
<td>4 lecture &amp; lab</td>
<td>A comprehensive lecture and laboratory course providing concepts and techniques for the administration of local anesthetic agents and nitrous oxide. Experience gained in medical history review, record keeping, patient management and hands on experience administering local anesthetics and nitrous oxide in a clinical setting. <strong>Prerequisites:</strong> DHE119 and current CPR certification.</td>
</tr>
<tr>
<td>DHE229</td>
<td>Community Oral Health</td>
<td>3</td>
<td>3</td>
<td>An examination of methods used to assess the oral health status of the community and to plan, implement, finance and evaluate dental public health programs. Focus on community-based health promotion and disease prevention measures to improve the oral health of the population, as well as the characteristics of dental care delivery systems and the social, political, psychological and economic factors affecting utilization within the system. <strong>Prerequisites:</strong> Admission to the Dental Hygiene Program or permission of instructor.</td>
</tr>
<tr>
<td>DHE232</td>
<td>Dental Hygiene Theory III</td>
<td>2</td>
<td>3 lecture + lab</td>
<td>Study of the dental hygiene process of care with emphasis on the patient with special needs and advanced instrumentation. Students participate in field observations and present case documentations. <strong>Prerequisites:</strong> (DHE212 and DHE213), and admission to the Dental Hygiene Program. <strong>Corequisites:</strong> DHE233.</td>
</tr>
<tr>
<td>DHE233</td>
<td>Dental Hygiene Clinic III</td>
<td>5</td>
<td>15</td>
<td>Application of the dental hygiene process of care with emphasis on diverse populations. Students prepare for clinical practice using self assessment, evaluation and critical thinking skills. <strong>Prerequisites:</strong> (DHE212 and DHE213), and admission to the Dental Hygiene Program. <strong>Corequisites:</strong> DHE232.</td>
</tr>
<tr>
<td>DHE290</td>
<td>Dental Hygiene Board Review</td>
<td>1</td>
<td>1</td>
<td>Condensed review of the sciences of the dental hygiene profession. Prepares student for the Dental Hygiene National Board Examination. Course employs case studies and administration of a mock written board. <strong>Prerequisites:</strong> DHE212.</td>
</tr>
<tr>
<td>DHE298AA-AC</td>
<td>Special Projects</td>
<td>1-3</td>
<td>1-3</td>
<td>Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. <strong>Prerequisites:</strong> None.</td>
</tr>
</tbody>
</table>

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Revised: 9/2/2011; 10/28/11; 12/7/11
ECE – Engineering Science

**ECE102**  
Engineering Analysis Tools/Techniques  
2 credit(s) 4 period(s) lecture + lab  
Learning culture of engineering, engineering use of computer tools, and computer modeling as applied to engineering analysis and design. **Prerequisites:** Two years of high school algebra or MAT122 or departmental approval. **Corequisites:** MAT151 or MAT182 or MAT187.

**ECE103**  
Engineering Problem Solving and Design  
2 credit(s) 4 period(s) lecture + lab  
Proposed Description: Fundamentals of the design process: engineering modeling, communication, and problem-solving skills in a team environment. Emphasis on process-based improvements to the design process. Introduction to engineering as a profession. **Prerequisites:** ECE102, high school physics, or PHY111.

**ECE211**  
Engineering Mechanics - Statics  
3 credit(s) 5 period(s) lecture & lab  
Mathematical treatment of the basic physical principles of statics. Methods of vector algebra and vector calculus. **Prerequisites:** ECE103, (MAT230 or MAT231), and (PHY115 or PHY121). **Corequisites:** MAT241.

**ECE212**  
Engineering Mechanics - Dynamics  
3 credit(s) 5 period(s) lecture & lab  
Kinematics and kinetics of particles, translating and rotating coordinate systems, rigid body kinematics, dynamics of systems of particles and rigid bodies, and energy and momentum principles. **Prerequisites:** ECE211 and MAT241.

**ECE241**  
Plane Surveying  
3 credit(s) 5 period(s) lecture + lab  
Theory and field work in construction and land surveys. Includes use of the level and transit, horizontal measurement by tape and computation, establishment of line and grade. **Prerequisites:** Knowledge of right triangle trigonometry.

ECH – Early Childhood Education

**ECH/CFS176**  
Child Development  
3 credit(s) 3 period(s) lecture  
Study of the science of human development from conception through adolescence. Includes observation skills, parent and adult roles in the lives of children, and contemporary issues. **Prerequisites:** None.

**ECH182**  
Enhancing Toddler Development  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Overview of the developmental needs of children from 15 through 30 months. Emphasis on the adult role in providing a safe, stimulating everyday environment where toddlers may explore, imitate and communicate with others. **Prerequisites:** None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
ECH236  
Learning Materials for Young Children  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Design aspects of traditional early childhood play materials examined for teaching/learning potential. Includes design, production, and field-testing of teacher-made devices. **Prerequisites:** None.

ECH270  
Observing Young Children  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Introduction to techniques of observing young children. Recording methods, interpretation and use of collected information including legal and ethical implications. **Prerequisites:** None.

ECH/CFS271  
Arranging the Environment  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Exploration of the influence of the environment on the behavior of young children. Indoor and outdoor spaces considered and analysis of environments practiced. **Prerequisites:** None.

ECH274  
Books and Verse For the Young Child  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Introduction to verse, storytelling, books and bookmaking for infants, toddlers, and preschoolers. Information as well as storybooks considered. **Prerequisites:** None.

ECH/CFS275  
Literacy Development and the Young Child  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Literacy from birth through the early childhood years. Focus on developmentally appropriate ways to encourage speaking, listening, writing, and reading in the home and classroom. **Prerequisites:** None.

ECH281  
Movement/Music for the Young Child  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Consideration of motor development in the toddler through the 8-year-old and exploration of age-appropriate rhythmic, musical and creative movement methods. **Prerequisites:** None.

ECH/CFS287  
Professional Development in Early Childhood Education  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Emerging professionalism within the field of early childhood education. Consideration of job responsibilities, rewards, ethics and current issues facing practitioners. Includes assessment and career planning. **Prerequisites:** None.

ECH/CFS288  
Community Resources and Referral  
1 credit(s) 1 period(s) lecture  
(Not offered every semester)  
Survey of current community agencies, resources, and support groups for a variety of child and family needs. Considers appropriate procedures for referral, handling of information, confidentiality and follow up. **Prerequisites:** None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
ECN – Economics

**ECN211 [ECN2201]**
Macroeconomic Principles
3 credit(s) 3 period(s) lecture
A descriptive analysis of the structure and functioning of the American economy. Emphasis on basic economic institutions and factors that determine national income and employment levels. Consideration given to the macroeconomic topics of national income, unemployment, inflation and monetary and fiscal policies. **Prerequisites:** None.

**ECN212 [ECN2202]**
Microeconomic Principles
3 credit(s) 3 period(s) lecture
Microeconomic analysis including the theory of consumer choice, price determination, resource allocation and income distribution. Includes non-competitive market structures such as monopoly and oligopoly, and the effects of government regulation. Selected issues examined. **Prerequisites:** None.

**ECN263**
The Economics of Natural Resources, Population and the Environment
3 credit(s) 3 period(s) lecture
Applies economic analysis to both the causes and possible remedies of the problems of environmental deterioration and natural resource depletion. Includes discussion of the economic problems of urban communities and the relationship between population and economic growth and the depletion of natural resources and environmental pollution. **Prerequisites:** ECN100, or ECN211, or ECN212.

EDU – Education

**EDU220**
Introduction to Serving English Language Learners (ELL)
3 credit(s) 3 period(s) lecture
Rationale for and current educational and legal issues for serving English Language Learners (ELL). Comparison and evaluation of various types of language educational models including Structured English Immersion (SEI), English as a Second Language (ESL) and bilingual. Includes SEI, ESL, and bilingual strategies. **Prerequisites:** None. **Course Note:** Approved school-based practicum is required. EDU220 incorporates the 45-clock hour curricular framework for provisional SEI endorsement through the Arizona Department of Education.

**EDU221**
Introduction to Education
3 credit(s) 3 period(s) lecture
Overview of the historical, political, economic, social, and philosophical factors that influence education and make it so complex. Opportunity for students to assess their interest and suitability for teaching. **Prerequisites:** None. **Course Note:** Requires minimum of 30 hours of field experience in elementary or secondary classroom environment.

**EDU222**
Introduction to the Exceptional Learner
3 credit(s) 3 period(s) lecture
Overview of the exceptional learner, one who differs from the average or normal, with emphasis on factors relating to current practices, identification, characteristics, and educational adaptations. Issues related to mildly disabled, severely disabled, emotionally and behaviorally disordered, mentally retarded, and gifted students. Includes school-based practicum. **Prerequisites:** None.

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EDU230
Cultural Diversity in Education
3 credit(s) 3 period(s) lecture
Examination of the relationship of cultural values to the formation of self-concept and learning styles. Examination of the role of prejudice, stereotyping, and cultural incompatibilities in education. Emphasis on teacher preparation (preservice and/or inservice) to offer an equal educational opportunity to students of all cultural groups. Prerequisites: None.

EDU250
Teaching and Learning in the Community College
3 credit(s) 3 period(s) lecture
The history, functions, organization and current issues in the community/junior college with emphasis on the Arizona community colleges. Includes focus on the design and practice of effective community college teaching and learning with special emphasis on the Maricopa County Community College District. Prerequisites: None.

EDU/ENH291
Children’s Literature
3 credit(s) 3 period(s) lecture
Review of folk and modern literature from a variety of world cultures, including application of literary criteria to folk and modern literature for children. Prerequisites: None.

EDU/HUM/STO292
The Art of Storytelling
3 credit(s) 3 period(s) lecture
Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning environment in the classroom. Prerequisites: None.

EDU298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

EED – Early Education

EED205
The Developing Child: Prenatal to Age Eight
3 credit(s) 3 period(s) lecture
Examination of process of physical, social, emotional, cognitive, language, and literacy development of typical and atypical young children, prenatal through age eight. Includes practical application and fieldwork experience. Prerequisites: None.

EED215
Early Learning: Health, Safety, Nutrition and Fitness
3 credit(s) 3 period(s) lecture
Consideration of public health issues and safety procedures within early childhood settings, serving young children birth to age eight. Overview of nutritional needs and issues of physical fitness and well-being in young children. Includes field experiences. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
EMT – Emergency Medical Technology

EMT/HLR101
Cardiopulmonary Resuscitation/Basic
Cardiac Life Support
0.5 credit(s) 0.45 period(s) lecture
Designed to train students in the skills of cardiopulmonary resuscitation to include mouth-to-mouth, mouth-to-mask, and cardiac compression, stabilization of adult, infant, and child victims with airway obstruction, respiratory, and cardiac arrest. **Prerequisites:** None.

EMT/FSC104
Basic Emergency Medical Technology
8 credit(s) 9.45 period(s) lecture + lab
Techniques of emergency medical care in accordance with national and state curriculum. Study of the human body, patient assessment, treatment of medically or traumatically compromised patients, special hazards, and medical operations. IV monitoring, Sudden Infant Death Syndrome (SIDS), patient-assisted medication administration, automated external defibrillators, and blood-glucose monitoring. Includes participation in two eight-hour clinical rotations through a local emergency department scheduled during the semester outside normal class hours. Requires personal pocket mask, stethoscope, pen light, and trauma scissors. **Prerequisites:** Must be at least 18 years of age prior to applying to the BLS (Basic Life Support) Training Program per Arizona Revised Statutes, and must have a current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer. Minimum ninth grade level reading proficiency on the Nelson-Denney Examination or appropriate Reading placement test score. Proof of: TB testing or chest x-ray with a negative result within 6 months prior to registration; Immunity to rubella (German measles) and rubeola.

EMT106
Ambulance Operations
2 credit(s) 2 period(s) lecture + lab
Practical application of rules and regulations governing care and transport of patient. Inventory, methods of disinfection, and charge procedures covered. Practical and defensive techniques and maintenance of the ambulance demonstrated and practiced, according to the U.S. Department of Transport (DOT) National Highway Traffic Safety Administration (NHTSA). **Prerequisites:** EMT at any level of certification.

EMT116
Emergency Medical Communications (EMD)
1.5 credit(s) 1.8 period(s) lecture + lab
Designed to educate and train individuals as the emergency link among the community, health care providers, and law enforcement agencies. Comprehensive program to educate and train in procedures of communications, interrogation, assessment, and deployment. Includes interactive computer lab and scheduled observation with assignment at a dispatch center. **Prerequisites or Corequisites:** EMT101 or HLR101, or any current American Red Cross, or CPR for the Professional Rescuer, or American Heart Association Basic Life Support Health Care Provider validation.

EMT120
Spanish for Emergency-Care Providers
1 credit(s) 1 period(s) lecture
Participative course for prehospital and other emergency-care providers. Vocabulary, pronunciations, voice inflections, phrases, conversational terms, and methods of interviewing the ill or injured victim. Cultural information to facilitate approach and interaction with the victim, family, and/or significant other. Documentation of the interview content on the prehospital encounter form. **Prerequisites:** Certified EMT or licensed medical personnel.

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Revised: 9/2/2011; 10/28/11; 12/7/11
EMT122
American Sign Language for Emergency-Care Providers
1 credit(s) 1 period(s) lecture
A participative course designed for the prehospital health-care provider. Vocabulary to create phrases, terms, and methods of interview for the ill or injured victim who is deaf. Cultural information designed to facilitate approach and interaction with the victim, family, and/or significant other. Documentation of the interview content on the prehospital encounter form. **Prerequisites:** None.

EMT165
Pediatric Education for Prehospital Providers: Basic
2 credit(s) 2.87 period(s) lecture + lab
An interactive, scenario-based course designed for Basic EMTs who are not yet practicing in the field. Enables these EMTs to perform a rapid assessment of sick and injured children in a variety of different circumstances. Includes use of pediatric assessment triangle, developmental differences, injury prevention, basic airway management techniques, recognition of medical emergencies such as pediatric trauma, mechanism of injury, submersion events, children with special health care needs, abuse and neglect, child and family interactions, use of specialized equipment, and special issues in pediatric transportation. Treatment to children is in accordance with recommendations of the American Academy of Pediatrics. **Prerequisites:** EMT104, or permission of instructor.

EMT190
Pediatric Education for Prehospital Providers: Intermediate
0.5 credit(s) 0.72 period(s) lecture + lab
An interactive, scenario-based course designed for certified EMTs who practice in the field. Enables providers to perform a rapid assessment of sick and injured children in variety of circumstances. Includes use of pediatric assessment triangle, developmental differences, injury prevention, airway management techniques, intravenous and intraosseous access and monitoring, recognition of medical emergencies, pediatric trauma and mechanism of injury, submersion events, children with special health care needs, child abuse and neglect, child and family interactions, use of specialized equipment, documentation of signs, symptoms, care and transportation, special issues in pediatric transportation. Treatment to children is in accordance with recommendations of the American Academy of Pediatrics. **Prerequisites:** EMT at any level of certification and current employment as an EMT at any level, or permission of instructor.

EMT200
Refresher Course for Certified EMTs
2 credit(s) 2.7 period(s) lecture + lab
Designed to meet National and Arizona Department of Health Services (A-DHS) recertification for EMTs. Enhances the knowledge base of the Emergency Medical Technician (EMT) and reinforces basic skills competencies. **Prerequisites:** Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or permission of instructor.

EMT200AA
EMT - Basic Certification Renewal Challenge
0.6 credit(s) 0.6 period(s) lecture
Designed to contribute to Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (BEMS) recertification requirements for Emergency Medical Technician Basic (EMTB) according to the U.S. Department of Transportation (DOT) EMT-Basic National Curriculum and the Arizona EMT Basic Refresher Curriculum Guidelines. **Prerequisites:** Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or proof of current registry with the National Registry of Emergency Medical Technicians (NREMT).

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EMT201
Interactive Basic EMT Refresher
1 credit(s) 2.2 period(s) lecture + lab
Designed to contribute to Arizona Department of Health Services recertification requirements for Emergency Medical Technicians (EMT) according to the US Department of Transportation (DOT) EMT-Basic National Curriculum and the Arizona Basic EMT Refresher Curriculum Guidelines. Enhances the knowledge base of the EMT. Updates a wide variety of subjects including respiratory and cardiac emergencies, and interaction with advanced life support providers. Prerequisites: (Current EMT Basic certification in the state of Arizona or proof of current registry with the National Registry of Emergency Medical Technicians [NREMT]) and validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer.

EMT230
Advanced Concepts for EMTs
1.5 credit(s) 1.5 period(s) lecture + lab
Designed to meet Arizona Department of Health Services recertification requirements for EMTs. Enhances the knowledge base of the Emergency Medical Technician (EMT) and incorporates new information into daily practice. Updates a wide variety of subjects including medical and trauma emergencies, cardiac life support, interaction with advanced life support providers, and emergency scene management. Prerequisites: Current EMT certification in the state of Arizona.

EMT235
Emergency Cardiac Care
3 credit(s) 3 period(s) lecture
Designed to acquaint all levels of emergency care providers with basic electrocardiographic (ECG) rhythm analysis and interpretation and related care in a clinical and prehospital setting. Required content for the identification and treatment of cardiac emergencies. Prerequisites: EMT/FSC104 or permission of instructor.

EMT236
Pharmacology in an Emergency Setting
3 credit(s) 3 period(s) lecture
Designed for the Emergency Medical Technician dealing with the administration of emergency medications in the field as outlined in current paramedic legislation. In-depth coverage of medications enumerated in the algorithms of patient care as defined by the American Heart Association (AHA), Advanced Cardiac Life Support (ACLS). Coverage of medications that interact or interfere with the AHA ACLS algorithms. Indications, therapeutic effect, contra-indications, toxicology, and side effects to medications. Prerequisites: EMT/FSC104 or permission of instructor. MAT082 or equivalency preferred but not required.

EMT/FSC238
Vehicular Extrication and Patient Stabilization
2 credit(s) 2 period(s) lecture
Participative course designed for the Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides exposure to scene management, including size-up, disentanglement, victim stabilization for single and multi-victim situations, hazardous materials incidents, integration of local emergency medical services (EMS) for patient assessment and management, and standard operating procedures to selected victim scenarios. Prerequisites: Basic EMT certification, current enrollment in EMT Basic program, nurse with emergency department experience, or law enforcement personnel, or permission of instructor.

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EMT240
Advanced Cardiac Life Support
2 credit(s) 2 period(s) lecture
Designed to provide the healthcare professional with comprehensive information to identify emergency cardiovascular care and protocols for the patient in cardiac arrest, post-resuscitative patient management, and core cases in Advanced Cardiac Life Support (ACLS) according to current Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care 2004. Includes the ACLS approach to cardiovascular emergencies, elements of emergency cardiovascular care, ethical and legal issues, airway assessment and management, ventilation techniques, oxygen therapy, intravenous therapy, analyzing and interpreting the electrocardiogram (ECG), analyzing and interpreting the 12-lead ECG, myocardial ischemia, injury, and infarction, electrical interventions, cardiovascular pharmacology, acute coronary syndromes, emergency cardiovascular care algorithms, acute stroke and transient ischemic attack, and special resuscitation situations. Prerequisites: Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer and (EMT235 and EMT236, or permission of instructor).

EMT241
Adv Cardiac Life Support Refresher
0.5 credit(s) 0.5 period(s) lecture + lab
Designed to provide the healthcare professional with a review and updated information in emergency cardiovascular care and protocols for the patient in cardiac arrest, post-resuscitative patient management, and core cases in Advanced Cardiac Life Support (ACLS) according to current Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care 2004. Includes the ACLS approach to cardiovascular emergencies, elements of emergency cardiovascular care, ethical and legal issues, review and validation of the techniques of airway assessment and management, ventilation techniques, oxygen therapy, intravenous therapy, analyzing and interpreting the electrocardiogram (ECG), analyzing and interpreting the 12-lead ECG, myocardial ischemia, injury, and infarction, electrical interventions, cardiovascular pharmacology, acute coronary syndromes, emergency cardiovascular care algorithms, acute stroke and transient ischemic attack, and special resuscitation situations. Prerequisites: (Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or EMT240) or permission of instructor.

EMT242
Pediatric Advanced Life Support
1 credit(s) 1 period(s) lecture
Didactic and psychomotor skill education and training in techniques of Pediatric Advanced Life Support. Includes endotracheal intubation, defibrillation, arrhythmia recognition, pharmacology, and intraosseous infusion. Required for American Heart Association Provider approval and validation. Prerequisites: (Current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer or [EMT235 and EMT236]) or permission of instructor.

EMT243
Pediatric Advanced Life Support Refresher
0.5 credit(s) 1.5 period(s) lecture + lab
Current American Red Cross or American Heart Association Health Care Provider validation. Current validation in Pediatric Advanced Life Support. Prerequisites: EMT242, or permission of instructor.

EMT245
Trauma Management
2 credit(s) 3.5 period(s) lecture + lab
Designed to instruct prehospital care personnel in the critical skills necessary to manage the trauma victim and the emergency scene through the Incident Command System (ICS). Enhances basic emergency medical technology (EMT) skills by focusing on emergency care interventions. Provides exposure to victim assessment, initial treatment, resuscitative techniques, victim stabilization, transportation of the victim to an emergency care facility, and documentation. Prerequisites: Basic EMT certification or nurse with emergency room experience, or permission of department.
EMT246
Trauma Management II
4 credit(s) 4 period(s) lecture + lab
Designed to instruct advanced prehospital care personnel in the critical skills necessary to manage the trauma victim and the emergency scene through the Incident Command System (ICS). Enhances advanced emergency medical technology (EMT) skills by focusing on emergency care interventions. Provides advanced exposure to victim assessment, initial treatment, resuscitative skills, invasive techniques, electrical and pharmacologic interventions, stabilization, transportation of the victim to an emergency care facility, and documentation. Prerequisites: Certified as a Basic EMT, Intermediate EMT, Paramedic, or Arizona registered prehospital nurse, or permission of instructor.

EMT249
12 Lead ECG Rhythm Analysis
0.5 credit(s) 0.5 period(s) lecture
Designed to acquaint all levels of emergency care providers with electrocardiographic (ECG) rhythm analysis and interpretation using the 12-lead electrocardiogram (ECG). Required content for identification and treatment of myocardial infarction and its complications. Prerequisites: EMT235, or permission of instructor.

EMT255AA
Instructional Strategies for EMT Occupations
2 credit(s) 2 period(s) lecture
Teaching skill preparation for entry-level Emergency Medical Services (EMS) educators and EMT instructor candidates to teach EMT courses or enhancement of teaching skills for experienced EMS instructors according to the Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (BEMS) and national guidelines. Includes instructor roles and responsibilities; administrative, legal, and ethical issues; learning environments and styles; domains of learning, including goals, objectives, and lesson planning; techniques for facilitation, presentations, evaluation, and discipline; principles of communication and feedback, student motivation, critical thinking, and remediation; cultural awareness; teaching resources; and research in EMS education. Prerequisites: (Arizona Department of Health Services certification as a Basic EMT, or Intermediate EMT, or Advanced EMT [Paramedic], or Arizona registered nurse with two-years experience in emergency nursing, or licensed physician or physician assistant), or permission of instructor.

EMT255AB
Advanced Cardiac Life Support
Instructional Strategies
1 credit(s) 1 period(s) lecture
A participative course to prepare advanced EMTs (Paramedics), physicians, and/or nurses as instructors in Advanced Cardiac Life Support courses. Includes American Heart Association Standards and guidelines, teaching and testing skills, writing objectives, preparing class and course schedules, preparing for lectures, developing and using audio visual (AV) aides; processing assignments and exams, classroom discipline, counseling, and student/instructor evaluation methods. Successful completion qualifies individual to teach Advanced Cardiac Life Support Classes. Prerequisites: Current certification as Advanced Cardiac Life Support Provider and (State of Arizona Advanced EMT [Paramedic] certification or Arizona Registered Nurse or licensed physician or physician assistant) or permission of instructor.

EMT255AC
Pediatric Advanced Life Support
Instructional Strategies
1 credit(s) 1 period(s) lecture + lab
A participative course to prepare advanced EMTs (Paramedics), physicians, and/or nurses as instructors in Pediatric Advanced Life Support courses. Includes American Heart Association Standards and guidelines, teaching and testing skills, writing objectives, preparing class and course schedules, preparing for lectures, developing and using audio visual (AV) aides; processing assignments and exams, classroom discipline, counseling, and student/instructor evaluation methods. Successful completion qualifies individual to teach Pediatric Advanced Life Support classes. Prerequisites: Current certification as Pediatric Advanced Life Support Provider and (State of Arizona Advanced EMT [Paramedic] certification or Arizona Registered Nurse or licensed physician).
EMT255AD
Basic Cardiac Life Support Instructional Strategies
0.5 credit(s) 0.5 period(s) lecture + lab
A participative course to prepare instructors in Basic Life Support (CPR) courses. Includes American Heart Association Standards and guidelines, teaching and testing skills, classroom discipline, counseling, and student/instructor evaluation methods. Successful completion qualifies individual to teach Basic Life Support (CPR) classes according to American Heart Association Standards. **Prerequisites:** Current certification as a Basic Life Support Health Care Provider level, EMT101 or HLR101, or equivalent.

EMT255AE
Emergency Medical Skills
Technician Skills Examiners
1 credit(s) 1 period(s) lecture + lab
Overview of roles and responsibilities for Emergency Medical Technician (EMT) skills identified in the USDOT Basic Life Support Curriculum, USDOT EMT-Intermediate Curriculum, and USDOT Paramedic National Standard Curriculum. Includes principles of adult learning, EMT skills benchmarks and critical criteria, evaluation principles and methods, skills station management, skills examination policies, and documentation of skills performance. **Prerequisites:** (Arizona Department of Health Services [A-DHS] certification as an EMT-Basic, EMT-Intermediate, Paramedic, or Arizona registered nurse with two years' experience in emergency nursing or licensed physician or physician assistant) or permission of instructor.

EMT260
Advanced Airway Management for EMTs
2 credit(s) 2 period(s) lecture + lab
Designed to instruct emergency care personnel in the critical skills necessary to establish and maintain an airway of the traumatized or medically compromised patient. Airway skills include oxygen therapy with all adjuncts, administration of pharmaceuticals via the endotracheal (ET)/pharyngeal tracheal lumen airway (PTLA), management of the airway as a route for medications, and invasive airway procedures. Content concurrent with Department of Transportation Guidelines and the American College of Surgeons Division on Trauma Standards of Care. **Prerequisites:** Certified EMT, or licensed registered nurse with emergency department experience; EMT or emergency department licensed registered nurse with Medical Control physician supervision according to Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (B-EMS).

EMT264
Vascular Access for EMTs
1 credit(s) 1 period(s) lecture + lab
Includes review of anatomy of circulatory system. Skills include peripheral intravenous cannulation techniques, fluid resuscitation, obtaining venous blood samples for laboratory analysis, infection control techniques for the safety of self and victim, and complications of intravenous cannulation; each and all with medical control. Content concurrent with American College of Surgeons Division of Trauma Standards of Care. **Prerequisites:** (EMT-Basic or registered nurse with emergency department experience or licensed physician or physician assistant) or permission of instructor.

For additional information on **PC program competencies**, visit: http://www.maricopa.edu/academic/ccta/curric/progpc.php

For additional information on **MCCCD course competencies**, visit: http://www.maricopa.edu/academic/ccta/curric/cs.php

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EMT265
Pediatric Education for Prehospital Providers: Advanced
1 credit(s) 1.43 period(s) lecture + lab
An interactive, scenario based course designed for Advanced EMTs who practice in the field. Enables providers to perform a rapid assessment of sick and injured children in variety of circumstances. Includes scene management, use of pediatric assessment triangle, developmental differences, injury prevention, airway management techniques, intravenous and intraosseous access and monitoring, ECG arrhythmia recognition, synchronized and unsynchronized cardioversion, pediatric trauma and mechanism of injury, submersion events, children with special health care needs, child abuse and neglect, child and family interactions, use of specialized equipment, documentation of signs, symptoms, care and transportation, special issues in pediatric transportation. Treatment to children is in accordance with recommendations of the American Academy of Pediatrics. Prerequisites: Advanced cardiac life support course or emergency cardiac care course, and EMT-Paramedic certification, and current employment as an EMT Paramedic, or permission of instructor.

EMT272AA
Advanced Emergency Medical Technology
12.5 credit(s) 17.3 period(s) lecture
Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology, and clinical symptoms, as they pertain to prehospital emergency care. Emphasis on developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Prerequisites: (MAT102 or equivalent, or a satisfactory score on the ASSET, or COMPASS, or Accuplacer placement exam), ENG101, EMT235, and EMT236, or permission of Program Director. Comprehensive written, oral and practical evaluation on all EMT272AA prerequisite courses. Valid Arizona certification and employment as an EMT for one full calendar year. Corequisites: EMT272AB and EMT272LL.

EMT272AB
Advanced Emergency Medical Technology
12.5 credit(s) 17.3 period(s) lecture
Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences in physiology, pathophysiology, and clinical symptoms, as they pertain to prehospital emergency care. Emphasis on developing diagnostic and advanced emergency treatment skills necessary to care for the acutely ill and seriously injured. Prerequisites: (MAT102 or equivalent, or a satisfactory score on the ASSET, or COMPASS, or Accuplacer placement exam), ENG101, EMT235, and EMT236, or permission of Program Director. Comprehensive written, oral and practical evaluation on all EMT272AB prerequisite courses. Valid Arizona certification and employment as an EMT for one full calendar year. Corequisites: EMT272AA and EMT272LL.

EMT272LL
Advanced Emergency Medical Technology Practicum
7.5 credit(s) 37.5 period(s) lab
Clinical and vehicular practicum in support of EMT272AA and EMT272AB. Prerequisites or Corequisites: EMT272AA and EMT272AB.
EMT273
Advanced Life Support Refresher Course
3.5 credit(s) 4 period(s) lecture + lab
Designed to meet requirements for EMT-Intermediate and EMT-Paramedic under guidelines of the U.S. Department of Transportation (U.S. DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS). Provides updated knowledge and skills related to hypoperfusion states, respiratory arrest or insufficiency, seizure states, cardiovascular emergencies, unconscious of undetermined etiology, head injury with altered levels of consciousness, and chest trauma. Validates requisite knowledge, validates skills, reviews and informs students of new standards and technologies. Trains and educates out of state applicants in knowledge, procedures, medications, and skills specific to Arizona's system. Remediates students who have been unsuccessful three times on the certification examinations, and refreshes information for those who have expired certifications and desire re-entry into the EMS system. Prerequisites: (EMT - Advanced Paramedic certification or EMT - Intermediate certification or proof of current paramedic registry with the National Registry of Emergency Medical Technicians [NREMT]) or permission of instructor.

EMT273AA
Advanced Life Support Refresher Course: Part I
.75 credit(s) .75 period(s) lecture + lab
Designed to meet requirements for EMT-Intermediate and EMT-Paramedic under guidelines of the U.S. Department of Transportation (U.S. DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS). Provides updated knowledge and skills related to communication, medical legal issues, health /safety issues pertaining to pre-hospital care, and assessment and treatment of the trauma victim. Validates requisite knowledge, validates skills, reviews and informs students of new standards and technologies. Trains and educates out-of-state applicants in knowledge, procedures, medications, and skills specific to Arizona's system. Remediates students who have been unsuccessful three times on the certification examinations, and refreshes information for those who have expired certifications and desire re-entry into the EMS system. Prerequisites: (EMT - Advanced Paramedic certification or EMT - Intermediate certification or proof of current paramedic registry with the National Registry of Emergency Medical Technicians [NREMT]) or permission of instructor.

EMT273AB
Advanced Life Support Refresher Course: Part II
1 credit(s) 1.25 period(s) lecture + lab
Designed to meet requirements for EMT-Intermediate and EMT-Paramedic under guidelines of the U.S. Department of Transportation (U.S. DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS). Provides updated knowledge and skills related to airway assessment and treatment, including all Basic Life Support (BLS) and Advanced Life Support (ALS) level skills, pharmacology, and assessment and treatment of the cardiac patient. Validates requisite knowledge, validates skills, reviews and informs students of new standards and technologies. Trains and educates out-of-state applicants in knowledge, procedures, medications, and skills specific to Arizona's system. Remediates students who have been unsuccessful three times on the certification examinations, and refreshes information for those who have expired certifications and desire re-entry into the EMS system. Prerequisites: (EMT - Advanced Paramedic certification or EMT - Intermediate certification or proof of current paramedic registry with the National Registry of Emergency Medical Technicians [NREMT]) or permission of instructor.
EMT273AC
Advanced Life Support Refresher Course: Part III
.75 credit(s) .75 period(s) lecture + lab
Designed to meet requirements for EMT-Intermediate and EMT-Paramedic under guidelines of the U.S. Department of Transportation (U.S. DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS). Provides updated knowledge and skills related to the assessment and treatment of the medical patient. Validates requisite knowledge, validates skills, reviews and informs students of new standards and technologies. Trains and educates out-of-state applicants in knowledge, procedures, medications, and skills specific to Arizona's system. Remediates students who have been unsuccessful three times on the certification examinations, and refreshes information for those who have expired certifications and desire re-entry into the EMS system. Prerequisites: EMT - Advanced Paramedic certification or EMT - Intermediate certification or proof of current paramedic registry with the National Registry of Emergency Medical Technicians [NREMT] or permission of instructor.

EMT273AD
Advanced Life Support Refresher Course: Part IV
1 credit(s) 1.25 period(s) lecture + lab
Designed to meet requirements for EMT-Intermediate and EMT-Paramedic under guidelines of the U.S. Department of Transportation (U.S. DOT), National Registry of EMTs (NREMT) as recognized by the Arizona Department of Health Services (A-DHS) Bureau of Emergency Services (B-EMS). Provides updated knowledge and skills related to the assessment and treatment of the neonatal and pediatric patient. Validates requisite knowledge, validates skills, reviews and informs students of new standards and technologies. Trains and educates out-of-state applicants in knowledge, procedures, medications, and skills specific to Arizona's system. Remediates students who have been unsuccessful three times on the certification examinations, and refreshes information for those who have expired certifications and desire re-entry into the EMS system. Prerequisites: EMT - Advanced Paramedic certification or EMT - Intermediate certification or proof of current paramedic registry with the National Registry of Emergency Medical Technicians [NREMT] or permission of instructor.

ENG – English

NOTE: The student must complete course placement for English placement in order to register for some ENG courses. Seek Academic Advisement.

ENG071
Language Skills: Speaking and Writing Standard English
3 credit(s) 3 period(s) lecture
Emphasis on basic Standard English speaking and writing skills with a focus on essential grammar in developing effective sentence-level speaking and written strategies. Prerequisites: Appropriate writing placement test score or permission of Department or Division.

ENG081
Basic Writing Skills
3 credit(s) 3 period(s) lecture
Emphasis on preparation for college-level composition with a focus on foundational skills. Establishing effective writing strategies through six or more writing projects comprising at least 1500 words in total. Prerequisites: Appropriate writing placement test score, or a grade of C or better in ENG071 or ESL077, or permission of Department or Division.

ENG091
Fundamentals of Writing
3 credit(s) 3 period(s) lecture
Emphasis on preparation for college-level composition with a focus on organizational skills. Developing effective writing strategies through five or more writing projects comprising at least 2000 words in total. Prerequisites: Appropriate writing placement test score, or a grade of C or better in ENG081 or ESL087, or permission of Department or Division.

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ENG100AA  
American-English Spelling System  
1 credit(s) 1 period(s) lecture  
American-English spelling system rules, mnemonic devices. **Prerequisites:** Appropriate English placement test score, or a grade of C or better in ESL040, or (ESL040AA, ESL040AB, and ESL040AC), or ENG091, or permission of Instructor.

ENG100AC  
The Mechanics of Written English  
1 credit(s) 1 period(s) lecture  
Review of the mechanics of written English, including punctuation, arbitrary marks and usages, capitalization, agreement, tense, and sentence patterns. **Prerequisites:** Appropriate English placement test score, or a grade of C or better in ESL040, or (ESL040AA, ESL040AB, and ESL040AC), or ENG091, or permission of Instructor.

ENG101  
First-Year Composition  
3 credit(s) 3 period(s) lecture  
Emphasis on rhetoric and composition with a focus on expository writing and understanding writing as a process. Establishing effective college-level writing strategies through four or more writing projects comprising at least 3,000 words in total. **Prerequisites:** Appropriate writing placement test score, or a grade of C or better in ENG091 or ESL097.

ENG107  
First-Year Composition for ESL  
3 credit(s) 3 period(s) lecture  
Equivalent of ENG 101 for students of English as a Second Language (ESL). Emphasis on rhetoric and composition with a focus on expository writing and understanding writing as a process. Establishing effective college-level writing strategies through four or more writing projects comprising at least 3,000 words in total. **Prerequisites:** Appropriate writing placement test score, or a grade of C or better in ENG091 or ESL097.

ENG108  
First-Year Composition for ESL  
3 credit(s) 3 period(s) lecture  
Equivalent of ENG102 for students of English as a Second Language (ESL). Emphasis on rhetoric and composition with a focus on persuasive, research-based writing and understanding writing as a process. Developing advanced college-level writing strategies through three or more writing projects comprising at least 4,000 words in total. **Prerequisites:** Grade of C or better in ENG101.

ENG111  
Technical and Professional Writing  
3 credit(s) 3 period(s) lecture  
Covers analyzing, planning, organizing, researching, and writing correspondence, reports, and presentations for specific work-related audiences. Includes integrating data and graphics into work-related documents and presentations. **Prerequisites:** ENG101 with a grade of C, or better, or permission of Instructor.

ENG200  
Reading and Writing About Literature  
3 credit(s) 3 period(s) lecture  
Emphasis on critical analysis of various genres of literature; includes study of necessary terminology, introduction to methods of literary criticism, and practice in interpretation and evaluation. **Prerequisites:** ENG102.
ENG213
Introduction to the Study of Language
3 credit(s) 3 period(s) lecture
Study of language as code; phonetics, phonology, morphology, syntax, semantics; language acquisition; historical and socio-linguistics. Prerequisites: ENG102 or ENG111, with a grade of "C" or better, or permission of instructor.

ENG215
Strategies of Academic Writing
3 credit(s) 3 period(s) lecture
Advanced course in techniques of analyzing and writing academic expository prose. Writing to be research based. Prerequisites: A grade of "C" or better in ENG102 or ENG111, or permission of instructor.

ENG216
Persuasive Writing on Public Issues
3 credit(s) 3 period(s) lecture
Advanced course in techniques of analyzing and writing persuasive arguments addressing topics of current public interest. Papers research based. Prerequisites: ENG102.

ENG217
Personal and Exploratory Writing
3 credit(s) 3 period(s) lecture
(Fall only)
Using writing to explore one’s self and the world one lives in; emphasis on journal writing as a source and inspiration for public writing. Prerequisites: ENG101 or ENG107 or equivalent.

ENG219
Life Stories
3 credit(s) 3 period(s) lecture
Uses of biography and autobiography to pass on stories, hand down traditions, and share wisdom. Analysis and practice of biographical and autobiographical writing. Prerequisites: ENG101 and ENG102.

ENG235
Magazine Article Writing
3 credit(s) 3 period(s) lecture
Basic skills and techniques used by professional writers for publication in magazines. Includes analyzing markets, identifying article slant, writing query letters, research techniques, editing, and submission procedures. Emphasis on nonfiction. Prerequisites: None.

ENH – English Humanities

ENH110
Introduction to Literature
3 credit(s) 3 period(s) lecture
Introduction to international literature through various forms of literary expression; e.g., poetry, drama, essay, biography, autobiography, short story, and novel. Provides a global overview of literature with special emphasis on diverse cultural contributions of women, African Americans, Asian Americans, Hispanic Americans, and Native Americans. Prerequisites: None.

ENH111
Literature and the American Experience
3 credit(s) 3 period(s) lecture
Introduction to the foundations and diversity of American culture through a survey of its literature, including minority and women writers. Exploration of various facets of American culture including frontier, regional, rural, and urban life; ethnic, racial, and immigrant experience; and political and social philosophies. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
ENH112
Chicano Literature
3 credit(s) 3 period(s) lecture
Introduction to the works of Mexican-American writers of the southwest. Samples poetry, fiction, and essays viewed in their relationship to American cultural heritage and to contemporary culture. Prerequisites: None.

ENH114
African-American Literature
3 credit(s) 3 period(s) lecture
Survey of major African-American writers from Colonial period through the present; analysis of trends and movements within African-American literary history; analysis of literary types and selected works. Prerequisites: None.

ENH117
Rap Literature: The Oral Tradition
3 credit(s) 3 period(s) lecture
Survey of selected rap poetry looking at the oral tradition of Africa, the Caribbean, and the United States as precursors to East Coast, West Coast, Southern, North Central, and International development of the genre. Investigation of cultural environments, historical events, competitions (the "battles"), artists' biographies, and parallel art forms as they relate to the analysis of the genre and its themes. Prerequisites: None.

ENH202
World Literature After the Renaissance
3 credit(s) 3 period(s) lecture
Includes a selection of the world's literary masterpieces from the Renaissance to modern times. Prerequisites: None.

ENH204
Introduction to Contemporary Literature
3 credit(s) 3 period(s) lecture
Examines the work of major writers in poetry, fiction and drama from 1945 to the present. Examines important movements that have developed within these genre since 1945. Prerequisites: None.

ENH214
Poetry Study
3 credit(s) 3 period(s) lecture
(Spring only)
Involves reading, discussing, and analyzing poetry of various forms and from selected periods. Prerequisites: None.

ENH221
Survey of English Literature Before 1800
3 credit(s) 3 period(s) lecture
(Fall only)
Emphasizes the social and political backgrounds as well as the form and content of English literature from Anglo-Saxon times to the end of the eighteenth century. Prerequisites: (ENG101 or ENG107) or equivalent.

ENH222
Survey of English Literature After 1800
3 credit(s) 3 period(s) lecture
(Spring only)
Emphasizes the social and political backgrounds as well as the form and content of English literature in the nineteenth and twentieth centuries. Prerequisites: (ENG101 or ENG107) or equivalent.

ENH230
Introduction to Shakespeare
3 credit(s) 3 period(s) lecture
Introduces Shakespeare the playwright, the sonneteer, the linguist, and the citizen of the 17th century. Considers the major tragedies, comedies, histories, and sonnets; focuses on the use of language; and connects the writer to the time. Some emphasis on Shakespeare's influence through the centuries, noting parallels between the late 16th century and the late 20th century. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
ENH235
Survey of Gothic Literature
3 credit(s) 3 period(s) lecture
A study of the origins, common elements and characteristics, and historical development of Gothic literature with an exploration of the literary techniques and psychological aspects of the genre. Prerequisites: None.

ENH241
American Literature Before 1860
3 credit(s) 3 period(s) lecture
(Fall only)
Includes literature written prior to 1860 in the United States. Prerequisites: None.

ENH242
American Literature After 1860
3 credit(s) 3 period(s) lecture
(Spring only)
Includes literature written after 1860 in the United States. Prerequisites: None.

ENH250
Classical Backgrounds in Literature
3 credit(s) 3 period(s) lecture
Introduction to selected readings of Greek and Latin literature in translation and to the key elements as integral aspects of Western culture through successive ages. Prerequisites: None.

ENH251
Mythology
3 credit(s) 3 period(s) lecture
Deals with the myths and legends of civilizations with the greatest influence upon the development of the literature and culture of the English speaking people, and compares those myths with myths from other cultures. Prerequisites: None.

ENH254
Literature and Film
3 credit(s) 3 period(s) lecture
Presents works of literature and their film versions and analyzes distinguishing techniques of each medium. Prerequisites: ENG101, or ENG107, or equivalent.

ENH256
Shakespeare on Film
3 credit(s) 3 period(s) lecture
Presents cinematic versions of Shakespeare's plays and explains and analyzes how the dramatist's major tragedies, comedies, histories and romances have been presented on film. Prerequisites: None.

ENH259
American Indian Literature
3 credit(s) 3 period(s) lecture
Contemporary American Indian forms of literary expression. Selected oral traditions of American Indians. Trends and movements within American Indian literary history. Prerequisites: None.

ENH260
Literature of the Southwest
3 credit(s) 3 period(s) lecture
Investigates major themes in Southwestern American literature including the Western myth, minority roles in the region's literature, control of nature versus primacy of nature, and growth. Both prose and poetry are examined with an emphasis on contemporary Southwestern writing. Prerequisites: None.

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ENH/AIS/WST261  
Native Women's Literature:  
The Americas  
3 credit(s) 3 period(s) lecture  
Explores contemporary native women's (indigenous to the Americas) literature. Selected literature (oral tradition, poetry, fiction, nonfiction, and drama) focuses on themes relevant to native women. Examines the trends and movements within American Indian and women's literary history. **Prerequisites:** ENG101.

ENH275  
Modern Fiction  
3 credit(s) 3 period(s) lecture  
Includes novels and short stories of modern writers which reflect significant themes of our time. **Prerequisites:** None.

ENH/WST285  
Contemporary Women Writers  
3 credit(s) 3 period(s) lecture  
Explores twentieth century literature (short stories, essays, plays, and poetry) written by women and about women. Focus on themes relevant to women's lives regardless of age, creed, or ethnic background. **Prerequisites:** None.

ENH/EDU291  
Children's Literature  
3 credit(s) 3 period(s) lecture  
Review of folk and modern literature, including application of literary criteria to folk and modern literature for children. **Prerequisites:** None.

**ENV – Environmental Sciences**

ENV101  
Introduction to Environmental Science  
4 credit(s) 6 period(s) lecture & lab  
Interdisciplinary analyses of interactions among living and non-living environmental components, focusing on human influences. Scientific methods of investigating and solving environmental problems are introduced. **Prerequisites:** None.

**EPD – Education Professional Development**

EPD241  
Methods for Teaching the Bilingual Student  
3 credit(s) 3 period(s) lecture  
Methods of developing lesson plans in the content areas. Emphasis on components of bilingual curriculum content, teaching techniques, development and evaluation of teaching materials. **Prerequisites:** (SPA103 or SPA104), (EDU220 or EPD220 or EDU225), and proficiency in Spanish and must hold a provisional or standard elementary, or secondary, or special education or career and technical education teaching certificate. **Course Note:** EPD241 requires fifteen (15) hours of field experience in an elementary or secondary classroom environment.

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Revised: 9/2/2011; 10/28/11; 12/7/11
EPS – Entrepreneurial Studies

EPS102
Rich Dad’s CASHFLOW
2 credit(s) 2 period(s) lecture
Principles, processes, and tools that represent a new paradigm for financial literacy. Concepts and principles based upon Rich Dad Poor Dad, Cashflow Quadrant, and the Cashflow © 101 game. Prerequisites: None.

EPS103
Rich Dad’s Real Estate Investing
1 credit(s) 1 period(s) lecture
Covers the basics of investing in real estate, how to find property, evaluate property worth, negotiate investment transaction and how to manage real property. Prerequisites: EPS102.

ESL – English As a Second Language

ESL001
Basic English as a Second Language I
6 credit(s) 6 period(s) lecture
Listening, speaking, reading, and writing in English at a basic level. Focus on survival skills related to life in the United States. Introduction to elementary grammatical patterns. Prerequisites: None. Course Note: Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a total of twelve (12) credits.

ESL001AA
Basic English as a Second Language I: Personal Health
1 credit(s) 1 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to personal health when living in the United States. Introduction to elementary grammatical patterns. Prerequisites: None. Course Notes: Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a total of two (2) credits.

ESL001AB
Basic English as a Second Language I: Safety
1 credit(s) 1 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to personal safety when living in the United States. Introduction to elementary grammatical patterns. Prerequisites: ESL001AA or permission of instructor. Course Notes: Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a total of two (2) credits.

ESL001AC
Basic English as a Second Language I: Services
1 credit(s) 1 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills relating to services when living in the United States. Introduction to elementary grammatical patterns. Prerequisites: ESL001AB or ESL001BA, or permission of instructor. Course Notes: Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a total of two (2) credits.

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ESL001AD
Basic English as a Second Language I: Employment
1 credit(s) 1 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to employment when living in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** ESL001AC, or ESL001CA, or permission of instructor. **Course Notes:** Credit (P) or no credit (Z). Standard grading available according to procedures outlined in the catalog. May be repeated for a total of two (2) credits.

ESL001AE
Basic English as a Second Language I: Shopping
1 credit(s) 1 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to shopping when living in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** ESL001AD, or ESL001BB, or permission of instructor. **Course Notes:** Credit (P) or no credit (Z). Standard grading available according to procedures outlined in the catalog. May be repeated for a total of two (2) credits.

ESL001AF
Basic English as a Second Language I: Everyday Life
1 credit(s) 1 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to everyday life when living in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** ESL001AE, or permission of instructor. **Course Notes:** Credit (P) or no credit (Z). Standard grading available according to procedures outlined in the catalog. May be repeated for a total of two (2) credits.

ESL001BA
Basic ESL I: Personal Health and Safety
2 credit(s) 2 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to personal health and safety when living in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** None. **Course Notes:** Credit (P) or no credit (Z). Standard grading available according to procedures outlined in the catalog. May be repeated for a total of four (4) credits.

ESL001BC
Basic ESL I: Shopping and Everyday Life
2 credit(s) 2 period(s) lecture
Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to shopping and everyday life when living in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** ESL001BB or permission of instructor. **Course Notes:** Credit (P) or no credit (Z). Standard grading available according to procedures outlined in the catalog. May be repeated for a total of four (4) credits.

ESL001CA
Basic English as a Second Language I: Part I
3 credit(s) 3 period(s) lecture
Listening, speaking, reading, and writing in English at a basic level. Focus on survival skills related to life in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** None. **Course Note:** Credit (P) or no credit (Z). Standard grading available according to procedures outlined in the catalog. May be repeated for a total of six (6) credits.

ESL001CB
Basic English as a Second Language I: Part II
3 credit(s) 3 period(s) lecture
Listening, speaking, reading, and writing in English at a basic level. Focus on survival skills related to life in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** (ESL001CA or ESL001AC) or equivalent, or permission of instructor. **Course Note:** Credit (P) or no credit (Z). Standard grading available according to procedures outlined in the catalog. May be repeated for a total of six (6) credits.

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ESL002
Basic English as a Second Language II
6 credit(s) 6 period(s) lecture
Listening, speaking, reading, and writing in English at a high beginning level. Focus on survival skills related to life in the United States. Continuing development of grammatical patterns. **Prerequisites:** ESL001, or ESL001AF, or ESL001BC, ELS001CB or permission of Instructor. **Course Notes:** ESL002 may be repeated for a total of twelve (12) credits. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog.

ESL010
English as a Second Language I:
Grammar
3 credit(s) 3 period(s) lecture
First level of English as a Second Language (ESL). Emphasis on basic conversational skills, pronunciation, vocabulary building and grammar. Some reading and sentence level writing. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. **Prerequisites:** Appropriate ESL placement test score.

ESL010AA
English As A Second Language I:
Grammar
1 credit(s) 1 period(s) lecture
First module of the first level of English as a Second Language (ESL). Emphasis on basic conversational skills, pronunciation, vocabulary building, and grammar. Some reading and sentence-level writing. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of two (2) credits. **Prerequisites:** Appropriate ESL placement test score.

ESL010AB
English As A Second Language I:
Grammar
1 credit(s) 1 period(s) lecture
Second module of the first level of English as a Second Language (ESL). Emphasis on basic conversational skills, pronunciation, vocabulary building, and grammar. Some reading and sentence-level writing. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of two (2) credits. **Prerequisites:** Grade of "P" or "C" or better in ESL010AA.

ESL010AC
English As A Second Language I: Grammar
1 credit(s) 1 period(s) lecture
Third module of the first level of English as a Second Language (ESL). Emphasis on basic conversational skills, pronunciation, vocabulary building, and grammar. Some reading and sentence-level writing. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of two (2) credits. **Prerequisites:** Grade of "P" or "C" or better in ESL010AB.

ESL011
English as a Second Language I:
Listening and Speaking
3 credit(s) 3 period(s) lecture
Emphasis on listening and speaking skills involving survival skills. Asking and answering questions related to work, shopping, and personal safety. May be repeated for a maximum of six credits. **Prerequisites:** Appropriate ESL placement test score or ESL002.

ESL013
Vocabulary for ESL I
1 credit(s) 1 period(s) lecture
Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other activities. May be repeated for a maximum of two (2) credits. **Prerequisites:** Appropriate ESL placement test score or permission of instructor.

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ESL020
English as a Second Language II: Grammar
3 credit(s) 3 period(s) lecture
Second level of English as a Second Language (ESL). Continued emphasis on conversational skills, pronunciation, vocabulary building and grammar with some reading and sentence level writing. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score, or a grade of "P" or "C" or better in ESL010, or (ESL010AA, ESL010AB, and ESL010AC).

ESL021
English as a Second Language II: Listening and Speaking
3 credit(s) 3 period(s) lecture
Emphasis on listening and speaking skills involving social exchange. Asking and answering questions, using tag questions. Practice with question and answer patterns. Polite questions and responses. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or ESL010 or ESL011 or ESL012 or RDG010.

ESL022
ESL II-Writing with Oral Practice
3 credit(s) 3 period(s) lecture
Emphasis on basic writing skills, accompanied by recitation of short writings. Sentence patterns and introduction of paragraph writing. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL012, or permission of instructor.

ESL023
Vocabulary for ESL II
1 credit(s) 1 period(s) lecture
Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other activities. May be repeated for a maximum of two (2) credits. Prerequisites: Appropriate ESL placement test score or permission of instructor.

ESL030
English as a Second Language III: Grammar
3 credit(s) 3 period(s) lecture
Third level of English as a Second Language (ESL). Emphasis on sentence structure and paragraph building. Extensive grammar study and writing practice. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score, or a grade of "P" or "C" or better in ESL020, or (ESL020AA, ESL020AB, and ESL020AC).

ESL031
English as a Second Language III — Listening and Speaking
3 credit(s) 3 period(s) lecture
Emphasis on listening and speaking skills related primarily to academic environment. Asking questions, working in small groups, using college resources, informal oral presentation. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or ESL020 or ESL021 or ESL022 or RDG020.

ESL032
ESL III-Writing with Oral Practice
3 credit(s) 3 period(s) lecture
Emphasis on complex sentence patterns in writing and speech. Introduction to the prewriting and writing process in a college setting. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL022, or permission of instructor.

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ESL033
Vocabulary for ESL III
1 credit(s) 1 period(s) lecture
Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other activities. May be repeated for a maximum of two (2) credits. Prerequisites: Appropriate ESL placement test score or permission of instructor.

ESL040
English as a Second Language IV:
Grammar
3 credit(s) 3 period(s) lecture
Fourth level of English as a Second Language (ESL). Continued emphasis on sentence structure and paragraph building. Extensive grammar study and writing practice. Credit (P) or no credit (Z). Standard grading available according to procedures outlined in catalog. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score, or a grade of "P" or "C" or better in ESL030, or (ESL030AA, ESL030AB, and ESL030AC).

ESL041
English as a Second Language IV:
Listening and Speaking
3 credit(s) 3 period(s) lecture
Emphasis on academic skills. Listening to lectures, notetaking, peer interaction, accessing and using media resources, formal oral presentations. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL placement test score or ESL030 or ESL031 or ESL032 or RDG030.

ESL042
ESL IV-Writing with Oral Practice
3 credit(s) 3 period(s) lecture
Emphasis on paragraph writing and oral recitation of complex sentences and paragraphs. Introduction to the prewriting and writing process for short essays. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL032, or permission of instructor.

ESL043
Vocabulary for ESL IV
1 credit(s) 1 period(s) lecture
Emphasis on the acquisition of basic English vocabulary including identifying and pronouncing words related to people, medical/dental care, occupations and other activities. May be repeated for a maximum of two (2) credits. Prerequisites: Appropriate ESL placement test score or permission of instructor.

ESL050
Review Grammar For ESL
3 credit(s) 3 period(s) lecture
Review of grammatical concepts for ESL (English as a Second Language) students who have some previous experience in reading and writing English. Appropriate for students who want to practice sentence skills in English. May be repeated for a total of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in ESL040, or permission of instructor.

ESL050AA
Basic Review Grammar For ESL
1 credit(s) 1 period(s) lecture
Review of the use of English verbs and word placement in sentences for ESL students who have some previous experience in reading and writing English. Appropriate for students who want to practice sentence skills in English. May be repeated for a total of two (2) credits. Prerequisites: Appropriate ESL placement test score, or a grade of "C" or better in ESL010, or (ESL010AA, ESL010AB, and ESL010AC), or permission of instructor.

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ESL050AB
Intermediate Review Grammar
For ESL
1 credit(s) 1 period(s) lecture
Review of auxiliary verbs and the comparative and superlative for ESL students who have some previous experience in reading and writing English. Appropriate for students who want to practice sentence skills in English. May be repeated for a total of two (2) credits. Prerequisites: Appropriate ESL placement test score, or a grade of "C" or better in ESL020, or (ESL020AA, ESL020AB, and ESL020AC), or permission of instructor.

ESL050AC
Advanced Review Grammar For ESL
1 credit(s) 1 period(s) lecture
Review of verbals and gerunds for ESL students who have some previous experience in reading and writing English. Appropriate for students who want to practice sentence skills in English. May be repeated for a total of two (2) credits. Prerequisites: Appropriate ESL placement test score, or a grade of "C" or better in ESL030, or (ESL030AA, ESL030AB, and ESL030AC), or permission of instructor.

ESL051
Pronunciation Improvement for ESL Speakers
3 credit(s) 3 period(s) lecture
Individualized pronunciation practice and drills for English as a Second Language (ESL) speakers. May be repeated for a maximum of six (6) credits. Prerequisites: Appropriate ESL course placement score, or a grade of C or better in (ESL020 or ESL021 or ESL022 or RDG020), or permission of instructor.

ESL051AA
Pronunciation Improvement for ESL Speakers: Vowels
1 credit(s) 1 period(s) lecture
Individualized pronunciation practice and drills in English vowel sounds for English as a second language (ESL) speakers. May be repeated for a maximum of two (2) credits. Prerequisites: None.

ESL051AB
Pronunciation Improvement for ESL Speakers: Consonants
1 credit(s) 1 period(s) lecture
Individualized pronunciation practice and drills in English consonant sounds for English as a second language (ESL) speakers. May be repeated for a maximum of two (2) credits. Prerequisites: None.

ESL054
American Culture
3 credit(s) 3 period(s) lecture
Reading and writing about American culture including history, institutions and sports, and entertainment. Prerequisites: Appropriate ESL placement test score, or a grade of C or better in ESL040, or (ESL040AA, ESL040AB, and ESL040AC), or RDG040, or permission of instructor.

ESL054AA
American Culture: History
1 credit(s) 1 period(s) lecture
Reading and writing about American history. Prerequisites: Appropriate ESL placement test score, or a grade of C or better in ESL040, or (ESL040AA, ESL040AB, and ESL040AC), or RDG040, or permission of instructor.

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ESL054AB
American Culture: Institutions and Customs
1 credit(s) 1 period(s) lecture
Reading and writing about American cultural institutions and customs. **Prerequisites:** Appropriate ESL placement test score, or a grade of C or better in ESL040, or (ESL040AA, ESL040AB, and ESL040AC), or RDG040, or permission of instructor.

ESL054AC
American Culture: Sports and Entertainment
1 credit(s) 1 period(s) lecture
Reading and writing about American sports and entertainment. **Prerequisites:** Appropriate ESL placement test score, or a grade of C or better in ESL040, or (ESL040AA, ESL040AB, and ESL040AC), or RDG040, or permission of instructor.

ESL071
Advanced Pronunciation and Oral Reading for ESL
3 credit(s) 3 period(s) lecture
Pronunciation practice and review, spelling of English sounds, and oral reading for stress and intonation patterns in English. **Prerequisites:** A grade of C or better in ESL051, or permission of instructor. **Course Note:** May be repeated for a total of six (6) credit hours.

ESL077
Language Skills: Speaking and Writing Standard English for English Language Learners
3 credit(s) 3 period(s) lecture
Emphasis on basic Standard English speaking and writing skills. Focus on essential idiomatic grammar in developing effective sentence-level speaking and writing strategies. **Prerequisites:** Appropriate writing placement test score or permission of Department or Division.

ESL087
Basic Writing Skills for English Language Learners
3 credit(s) 3 period(s) lecture
Emphasis on basic writing skills using Standard English in sentences and short paragraphs incorporating correct, clear, and idiomatic English in preparation for college-level composition. Establish effective writing strategies through six or more writing projects. **Prerequisites:** Appropriate writing placement test score, or grade of C or better in ESL077 or ENG071, or permission of Department or Division

ESL097
Fundamentals of Writing for English Language Learners
3 credit(s) 3 period(s) lecture
Emphasis on writing paragraphs and short essays using Standard English incorporating correct, idiomatic English in preparation for college-level composition with a focus on organizational skills. Developing effective writing strategies through five or more writing projects. **Prerequisites:** Appropriate writing placement test score, or a grade of C or better in ESL087 or ENG081, or permission of Department or Division.

EXS – Exercise Science

EXS112
Professional Applications of Fitness Principles
3 credit(s) 3 period(s) lecture
Basic principles of fitness for the prospective fitness professional and characteristics of quality communication and fitness leadership. Topics include behavior modification, enhancing motivation components of fitness, fitness assessment, risk stratification, exercise programming and modifications. **Prerequisites:** None.

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EXS125
Introduction to Exercise Physiology
3 credit(s) 3 period(s) lecture
Principles of exercise science applied to teaching fitness/aerobics. Major factors related to the function of the human body. Emphasis on anatomy/physiology, exercise physiology, and biomechanics. Prerequisites: None. BIO160 recommended but not required.

EXS130
Strength Fitness - Physiological Principles and Training Techniques
3 credit(s) 4.5 period(s) lecture + lab
Principles and techniques of strength training including strength physiology, performance factors, training recommendations, exercise techniques, and program design and management. Prerequisites: None.

EXS140
Principles of Safe Exercise
1 credit(s) 1 period(s) lecture
Overview of safety concepts and principles for the exercise leader. Includes injury recognition and referral sources; injury prevention; safe use of equipment; contraindicated exercises; proper stretching techniques; basic first aid principles, including CPR and common procedures utilized in classroom emergencies. Prerequisites: None.

EXS262*
Sports Officiating*
3 credit(s) 3 period(s) lecture
Methods, materials and techniques of playing and officiating in [sport]. Prerequisites: None.

*EXS262 Sports Officiating Modules:
BS Baseball/Softball
FB Football/Basketball

EXS262*
[Sport] Officiating
2 credit(s) 2 period(s) lecture
Methods, materials, and techniques of playing and officiating in [sport]. May not be repeated for credit. Prerequisites: None.

*EXS262 Officiating Modules:
BB Basketball
VB Volleyball

EXS265*
[Sport] Theory of Coaching
3 credit(s) 3 period(s) lecture
Discusses the impact of sports on the American culture, legal liabilities of coaching, principles of a coaching philosophy, the role of teaching skill, physical conditioning and nutrition in coaching, components of team/group psychology and dynamics, motivation and aggression in sport. Prerequisites: None. EXS281, suggested but not required.

*EXS265 Theory of Coaching Modules:
BA Baseball
BB Basketball
FB Football
SO Softball
VB Volleyball

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EXS281*
[Sport] Methods of Coaching
3 credit(s) 3 period(s) lecture
Comprehensive overview of the art and science of coaching, including development of coaching philosophy, techniques of sport pedagogy, practical application of sports skill teaching, sport physiology, nutrition, sport/team management and self-management. Prerequisites: None. EXS265 suggested but not required.

*EXS281 Selected Methods of Coaching Modules:
BA  Baseball
BB  Basketball
FB  Football
SB  Softball
SO  Soccer
VB  Volleyball

FON – Food and Nutrition

FON100
Introductory Nutrition
3 credit(s) 3 period(s) lecture
Basic nutrition concepts for health and fitness. Emphasizes current dietary recommendations for maximizing well-being and minimizing risk of chronic disease. Focuses on use of tables, food guides, and guidelines for making healthy food choices. Includes unique nutrition needs for selected stages of the lifecycle, methods for evaluating creditability of nutrition claims, principles of vegetarian nutrition, safe and economic use of supplements, principles of energy balance, basic elements of food safety, diet for exercise and sports, and personal dietary evaluation techniques. Not for predietetics or selected other preprofessional majors. May not be taken for credit if credit has been earned in FON100AA and/or FON100AC. Prerequisites: None.

FON/HRM102
Menu Planning
2 credit(s) 2 period(s) lecture
(Not offered every semester)
Principles and techniques of menu planning for food service operations where food is served in quantity; includes applications for health care institutions, commercial kitchens, school cafeterias, and industrial facilities. Prerequisites: None.

FON104
Certification in Food Service Safety and Sanitation
1 credit(s) 1 period(s) lecture
Preparation for and certification in a national food sanitation and safety program. Emphasis on food from purchasing, receiving, and storing to preparation, holding, and serving. Focuses on safe and sanitary food service facilities and equipment, employee habits and personal hygiene, and role of management in safety and sanitation. Includes time-temperature principles, foodborne illnesses, pest control, accident prevention, standards for cleaning and sanitizing, and regional regulations and standards. Prerequisites: None.

FON118
Commercial Baking Techniques
3 credit(s) 5 period(s) lecture + lab
Principles and techniques for preparation, storage, and serving of bakery products. Includes breads, cakes, pies, pastry, cookies, fillings, and icings. Emphasis on practical experiences in a commercial bakery. Prerequisites: None.

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FON122
Principles of Food and Beverage Service
3 credit(s) 3 period(s) lecture
Qualities and skills necessary for successful food and beverage service. Includes room planning and setup, duties of service staff, types of service, customer relations, dining room etiquette, and cash management. **Prerequisites:** None.

FON124
Customer Service Practicum
4 credit(s) 11 period(s) lecture + lab
Professional food and beverage experience in a commercial food service operation. Focuses on food server, host/hostess, cashier, and busperson. Includes beverage preparation, application of sanitation, and safety concepts. Stresses professionalism in service, demeanor, and appearance. **Prerequisites:** FON104.

FON124AA
Customer Service Practicum
1 credit(s) 4 period(s) lecture + lab
Professional food and beverage experience in a commercial food service operation. Focuses on food server, host/hostess cashier, busperson. Includes beverage preparation, application of sanitation and safety concepts. Stresses professionalism in service, demeanor, and appearance. **Prerequisites:** FON104.

FON142AB
Applied Food Principles
3 credit(s) 5 period(s) lecture + lab
Exploration and application of scientific principles involved in food preparation; experiences with basic cooking methods; emphasis on the rationale of cooking techniques. **Prerequisites:** None.

FON150
Banquet Food and Beverage Service Externship
1 credit(s) 5 period(s) lab
*(Not offered every semester)*
Waiter/waitress serving experiences in a banquet setting; includes instructor-assisted placement, orientation, job seeking skills, and working a minimum of four banquets or twenty-four hours in banquet service. Professional appearance and attire required. **Prerequisites:** FON104, FON122, and FON124.

FON179
Garde Manger
3 credit(s) 5 period(s) lecture + lab
*(Not offered every semester)*
Prepares students for employment in garde manger pantry positions in restaurants and resorts. Includes costing out and ordering food products; food and safety factors; preparing and garnishing pantry product. Emphasis on classical food presentation. **Prerequisites:** None.

FON180
Principles and Skills for Professional Cooking
3 credit(s) 5 period(s) lecture + lab
Introductory principles and skills for professional cooking. Introduces organizational structure of kitchen staff in different types of kitchens. Includes basic principles of safety and sanitation, equipment and utensil use, French cooking terms, recipe use, measuring techniques, identification and use of seasoning agents, and basic cooking methods applied to stocks, sauces and soups, vegetables, starches, entrées and eggs. Emphasis on practical experience in a commercial kitchen. **Prerequisites:** None.

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FON181
French Cuisine
3 credit(s) 5 period(s) lecture + lab
(Not offered every semester)
Principles of French cooking applied to restaurant kitchens. Includes review of safety and sanitation principles, orientation to French culture, use of French terms and recipes, and reading French menus. Emphasis on practical experiences in preparing French meals in a restaurant kitchen. Introduces preparation of appetizers, hors d’oeuvres, charcuterie items, pastries and desserts. Prerequisites: None.

FON182
American Regional Cuisine
3 credit(s) 5 period(s) lecture + lab
American regional food preparation applied to restaurants. Review principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to selected American regions. Emphasis on practical cooking experiences in a restaurant setting. American regions to include, but not limited to: Southern, Cajun/Creole, New England, Mid-West, and Pacific Coast. Prerequisites: None.

FON183
International Cuisine
3 credit(s) 5 period(s) lecture + lab
Gourmet international food preparation applied to restaurants. Review principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to selected international cultures. Emphasis on practical cooking experiences in a restaurant kitchen. Cultures to include, but not limited to: Italian, German, Oriental, Middle Eastern, and Spanish. Prerequisites: None.

FON184
Pacific Rim Cuisine
3 credit(s) 5 period(s) lecture + lab
Local and gourmet Pacific Rim food preparation applied to restaurants. Overview of principles of sanitation and safety. Explores history and customs, serving styles, and preparation techniques of foods unique to Pacific Rim cultures. Emphasis on practical cooking experiences in a restaurant kitchen. Cultures to include, but not limited to: Chinese, Japanese, Thai, Korean, and South Pacific islands. Prerequisites: None.

FON185
Italian Cuisine
3 credit(s) 5 period(s) lecture + lab
Principles of Italian cooking applied to restaurant kitchens. Includes review of safety and sanitation principles, orientation to Italian culture, use of Italian terms and recipes, and reading Italian menus. Emphasis on practical experiences in preparing Italian meals in a restaurant kitchen. Introduces preparation of appetizers, entrees, salads, fresh pasta items, pastries, and desserts. Prerequisites: None.

FON190
Professional Cooking Practicum
7 credit(s) 19 period(s) lecture + lab
Preparation of hot and cold foods in a commercial food service operation; experience in volume food production preparing salads, soups, stocks, sauces, entrees, starches, and vegetables; designed to develop knowledge and skills necessary to cook in a variety of commercial kitchens. Prerequisites: FON104, FON180, or departmental approval.

FON190AA
Professional Cooking Practicum
1 credit(s) 3 period(s) lecture + lab
Preparation of hot and cold foods in a commercial food service operation; experience in volume food production preparing salads, soups, stocks, sauces, entrees, starches, and vegetables; designed to develop knowledge and skills necessary to cook in a variety of commercial kitchens. Must be repeated for a total of seven (7) credits. Prerequisites: FON104, FON180, or departmental approval.

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FON202
Purchasing for Food Service Systems
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Food purchasing for institutions: cost factors, quality standards, purchasing practices and controls. Prerequisites: None.

FON206
Food Service Management
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Administrative procedures and personnel relationships: Management of materials, costs, record keeping and legal aspects of food and beverage service operations. Prerequisites: None.

FON208
Supervisory Functions in Food Service
3 credit(s) 3 period(s) lecture
(Not offered every semester)
Principles and techniques of supervision applied to food service workers. Includes roles and responsibilities of a food service supervisor, basic theories of management, line staffing functions, basic concepts of communication, motivation techniques, problem-solving, labor relations and laws, performance evaluation and basic record keeping functions in food service settings. Prerequisites: None.

FON218
Commercial Baking: Classical Desserts
3 credit(s) 5 period(s) lecture + lab
(Not offered every semester)
Advanced principles and techniques in commercial baking and dessert preparation. Focus on fine pastries with European flair and on desserts served in better hotels, restaurants, and resorts. Preparation of macaroons, tarts, puff pastries, specialty cakes, and desserts such as Bavarian creams, mousses, custards, souffles, crepe desserts, and flammeries. Preparation and use of sauces, techniques for using nuts and chocolate, and exploration of new recipes. Prerequisites: None.

FON220
Advanced Pastry Arts
3 credit(s) 5 period(s) lecture + lab
Advanced pastry arts and decorative work as applied to showpieces and special occasion cakes. Includes sugar work such as pulled, blown, and poured as well as the use of tempered and modeling chocolate. Design and execution of a three-tier wedding cake as well as work on a special occasion and team wedding cake using gum paste, pastillage, chocolate, or marzipan. Includes desserts for special diets and spa desserts. Prerequisites: (FON118 and FON218, or industry equivalent), or permission of Program Director. Course Note: FON220 may be repeated for a total of six (6) credits.

FON241
Principles of Human Nutrition
3 credit(s) 3 period(s) lecture
Scientific principles of human nutrition. Emphasis on health promotion and concepts for conveying accurate nutrition information in a professional setting. Addresses therapeutic nutrition principles for treatment of common health conditions. Includes exploration of food sources of nutrients, basic metabolism of nutrients in the human body, relationship between diet and other lifestyle factors, use of supplements, current recommendations for food selection throughout the life cycle, and use of nutrition tools for planning food intake or assessment of nutritional status. Prerequisites: None.

Course information is subject to change. Visit http://www.maricopa.edu/academic/ccta/curric/cs.php for most current information.

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FON241LL
Principles of Human Nutrition Laboratory
1 credit(s) 3 period(s) lab
Self-evaluative laboratory experience to complement FON241, Principles of Human Nutrition using anthropometric, biochemical, and dietary analysis. Includes the use of qualitative and quantitative methodology to determine nutritional status and evaluate methodological applications. Prerequisites or Corequisites: FON241.

FON271AA
Culinary Studies Internship
1 credit(s) 5 period(s) lab
Work experience preparing hot and cold foods in a commercial food service operation, experience in volume food production preparing salads, soups, stocks, sauces, entrées, starches, and vegetables. Five (5) hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: FON104, FON180, and permission of Department or Division. Course Notes: FON271AA may be repeated for a total of seven (7) credits.

FON271AB
Culinary Studies Internship
2 credit(s) 10 period(s) lab
Work experience preparing hot and cold foods in a commercial food service operation, experience in volume food production preparing salads, soups, stocks, sauces, entrées, starches, and vegetables. Ten (10) hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: FON104, FON180, and permission of Department or Division. Course Notes: FON271AB may be repeated for a total of six (6) credits.

FON271AC
Culinary Studies Internship
3 credit(s) 15 period(s) lab
Work experience preparing hot and cold foods in a commercial food service operation, experience in volume food production preparing salads, soups, stocks, sauces, entrées, starches, and vegetables. Fifteen (15) hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: FON104, FON180, and permission of Department or Division. Course Notes: FON271AC may be repeated for a total of six (6) credits.

FRE – French

FRE085AA
Speedy French I
1 credit(s) 1 period(s) lecture
Basic vocabulary and grammar to develop conversational skills in French. Prerequisites: None.

FRE085AB
Speedy French II
1 credit(s) 1 period(s) lecture
Intermediate vocabulary and grammar to develop conversational skills in French. Prerequisites: FRE085AA.

FRE085AC
Speedy French III
1 credit(s) 1 period(s) lecture
Advanced vocabulary and grammar to develop conversational skills in French. Prerequisites: FRE085AB.

FRE101 S#__ FRE1101
Elementary French I
4 credit(s) 4 period(s) lecture
Basic grammar, pronunciation and vocabulary of the French language. Includes the study of French culture, practice of listening, speaking, reading and writing skills. Prerequisites: None.

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FRE102
Elementary French II
4 credit(s) 4 period(s) lecture
Continued study of grammar and vocabulary of the French language along with the study of French culture. Emphasis on speaking, listening, reading and writing skills. Prerequisites: FRE101 or equivalent.

FRE115
Beginning French Conversation I
3 credit(s) 3 period(s) lecture
Conversational French. Basic sentence structure, pronunciation and vocabulary necessary to develop speaking ability in French. Designed for students seeking speaking and listening abilities with little emphasis on grammar. Prerequisites: None.

FRE116
Beginning French Conversation II
3 credit(s) 3 period(s) lecture
A continuation of FRE115. Continued development of speaking and listening skills for effective communication in French. Prerequisites: FRE115 or equivalent.

FRE201
Intermediate French I
4 credit(s) 4 period(s) lecture
Review of essential grammar of the French language and study of French culture. Continued practice and development of reading, writing, and speaking skills. Prerequisites: FRE102 with a grade of "C" or better, two years of high school French with an average of "C" or better, or departmental approval.

FRE202
Intermediate French II
4 credit(s) 4 period(s) lecture
Review of grammar, continued development of French language skills, and continued study of the French culture. Prerequisites: FRE201 with a grade of "C" or better or three years of high school French with an average of "C" or better.

FSC – Fire Science Technology

FSC101
Intro to Fire Service Selection
3 credit(s) 4 period(s) lecture + lab
Overview of the application and selection processes used by various fire departments and fire service organizations. Elements of fire service culture and their effects on personal growth and interpersonal relationships. Major components of written application processes, requirements, preparation of resumes and their effect on employment prospects. Preparation for the interview to include communications skills, mental preparation techniques, behaviors, and the importance of the interview in the pre-employment process. Preparation for on-site experiences at a fire station. General components of the selection process, the importance of general education, and components of lifelong learning in career choices. Prerequisites: None.

FSC102
Fire Department Operations
11 credit(s) 19.6 period(s) lecture + lab
Introductory fire science course primarily designed for the fire department recruit. Includes firefighting skills, equipment, and administrative policies, fire department operations, personnel policies, and International Fire Service Accreditation Congress Practical Skills Testing. Prerequisites: (EMT104, FSC105 and FSC130) and permission of instructor. Corequisites: FSC134.

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FSC/EMT104
Basic Emergency Medical Technology
8 credit(s) 9.45 period(s) lecture + lab
Techniques of emergency medical care in accordance with national and state curriculum. Study of the human body, patient assessment, treatment of medically or traumatically compromised patients, special hazards, and medical operations. IV monitoring, Sudden Infant Death Syndrome (SIDS), patient-assisted medication administration, automated external defibrillators, and blood-glucose monitoring. Includes participation in two eight-hour clinical rotations through a local emergency department scheduled during the semester outside normal class hours. Requires personal pocket mask, stethoscope, pen light, and trauma scissors. **Prerequisites:** Must be at least 18 years of age prior to applying to the BLS (Basic Life Support) Training Program per Arizona Revised Statutes, and must have a current validation in Basic Life Support (BLS) Health Care Provider/Professional Rescuer. Minimum ninth grade level reading proficiency on the Nelson-Denney Examination or appropriate Reading placement test score. Proof of: TB testing or chest x-ray with a negative result within 6 months prior to registration; Immunity to rubella (German measles) and rubeola.

FSC105
Hazardous Materials/First Responder
3 credit(s) 3 period(s) lecture
Basic methods of recognition and identification based upon the chemical and physical properties of hazardous materials; basic safety procedures when utilizing specific types of protective clothing and equipment; basic tactical information relating to scene management. Confined space operations in accordance with the National Fire Protection Agency. **Prerequisites:** None.

FSC106
Introduction to Fire Protection
3 credit(s) 3 period(s) lecture
History and evaluation of fire department organization. Role of the fire service in the community. Responsibilities of the fire administrator including organization, departmental functions, interdepartmental relationships, management of buildings and equipment; techniques of firefighting. Also includes emergency medical services and fire prevention. **Prerequisites:** None.

FSC108
Fundamentals of Fire Prevention
3 credit(s) 3 period(s) lecture
Fundamentals of fire prevention. Includes techniques, procedures, regulations, and enforcement. Also includes discussion of hazards in ordinary and special occupancies. Field trips and lectures from industry also included. **Prerequisites:** None.

FSC/AJS/EMT112PS
Public Safety Emergency Telecommunications
3 credit(s) 3 period(s) lecture + lab
In-depth coverage of established techniques and procedures for handling routine and emergency public safety telephone calls and radio (contact) communications. Nationally recognized procedures for processing 9-1-1 emergency calls, field unit safety, injury scenarios, and demonstrating positive public relations. Fundamental skills and responsibilities for fire, emergency medical, and law enforcement complaint report processing as well as federal laws regarding proper processing, retention, and dissemination of security information. Definitions of terms unique to fire suppression, emergency medical, and law enforcement situations common within the public safety sector. **Prerequisites:** None.

FSC113
Introduction to Fire Suppression
3 credit(s) 3 period(s) lecture
Characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents, fire suppression organization and equipment, basic firefighting tactics, and public relations as affected by fire suppression. **Prerequisites:** None.

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FSC114
Hazardous Materials First on the Scene/Awareness Level
0.5 credit(s) 0.5 period(s) lecture
Designed to assist first responders involved in potential hazardous materials incident. Provides an overview of capabilities and limitations of first responders in the recognition and detection of hazardous materials, safety considerations, and pre-emergency planning. Prerequisites: None.

FSC117
Fire Apparatus
3 credit(s) 3 period(s) lecture
Principles of care, maintenance, and operation of fire apparatus and pumps. Includes pump construction and accessories, pumping techniques, power development, and transmission. Driving, troubleshooting, and producing effective fire streams. Prerequisites: None.

FSC118
Fire Hydraulics
3 credit(s) 3 period(s) lecture
Review of basic mathematics. Hydraulic laws and formulas as applied to the fire service. Application of formulas and mental calculations to hydraulic problems, water supply variables, and discharge requirements for pumps. Prerequisites: None.

FSC131
Introduction to Urban Technical Rescue
3 credit(s) 3 period(s) lecture + lab
Practical application of safe rescue practices for urban technical rescue. Includes ropes and rope systems, trench rescue, confined-space rescue, swiftwater rescue, and rescue from collapsed structures. Prerequisites: None.

FSC134
Fitness and Conditioning /Firefighters
3 credit(s) 4.6 period(s) lecture + lab
Overview of all aspects of fitness for current and prospective firefighters. Includes physical and mental aspects of performance for optimal achievement on fire department agility tests and fire fighting tasks; individual conditioning strategies, nutritional guidelines, protective clothing concepts, and basic exercise principles. Pre-employment, evaluation, and lifelong fitness and conditioning. Prerequisites: None.

FSC/EMT136
Women Firefighter Preparation
2 credit(s) 2.87 period(s) lecture + lab
Designed for women firefighting candidates. Includes firefighting techniques and procedure, physical/mental conditioning, health concerns, occupational opportunities, and mentorship programs. Prerequisites or Corequisites: FSC134 or permission of instructor.

FSC152
Engine Company Officer
1 credit(s) 1 period(s) lecture
Overview of all aspects of engine company operations including the activities and responsibilities performed by the captain as well as mechanisms for developing a personal supervisory style. Designed for the aspiring company officer or anyone having the opportunity for the role of a company officer. Prerequisites: None.

FSC202
Supervisory Training for Firefighters
3 credit(s) 3 period(s) lecture
Administrative methods applied to the fire service, departmental organization, and personnel management. Includes fire alarm signaling systems, fire service planning, and relationships with other city departments. Prerequisites: None.

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FSC204
Firefighting Tactics and Strategy
3 credit(s) 3 period(s) lecture
Methods of coordinating personnel, equipment, and apparatus on the fireground. Practical methods of controlling and extinguishing structural and other types of fires. Includes simulation exercises. Prerequisites: FSC113 or permission of instructor or equivalent.

FSC205
Command Strategies for Major Emergencies
3 credit(s) 3 period(s) lecture
Effective methods of managing major emergency incidents including multiple alarm structural fires, high rise fires, major brush fires, complex hazardous materials incidents and multi-casualty medical incidents. Includes incidents that require the commitment of resources based on a transitional situation and/or managing the effective interaction between numerous agencies to achieve control. Prerequisites: FSC204.

FSC208
Firefighter Safety and Building Construction
3 credit(s) 3 period(s) lecture
Actions necessary to provide for the safety of firefighters operating on the fireground. Effects that fire and heat may have on various types of building construction resulting in the loss of structural integrity. Includes signs and symptoms of structural damage. Prerequisites: FSC113 or permission of instructor or equivalent.

FSC209
Fire Investigation
3 credit(s) 3 period(s) lecture
Methods of determining point of fire origin, path of fire travel, and fire cause. Includes recognizing and preserving evidence; interviewing witnesses; arson laws and types of arson fires; and court testimony, reports, and records. Prerequisites: None.

FSC214
Human Resource Management in Fire Service
3 credit(s) 3 period(s) lecture
Management of fire service personnel functions. Includes selection procedures, employee discipline, performance ratings, elements of supervision. Labor relations and related personnel responsibilities. Prerequisites: FSC202 or four years in the fire service.

FSC221
Ladder Company Officer
1 credit(s) 1 period(s) lecture
Overview of all aspects of ladder company operations including activities, expectations, and responsibilities required of the ladder captain. Designed for the company officer who aspires to the role of ladder company officer. Prerequisites: None.

FSC/EMT238
Vehicular Extrication and Patient Stabilization
2 credit(s) 2 period(s) lecture
Participative course designed for the Emergency Medical Technicians (EMT). Incorporates new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides exposure to scene management, including size-up, disentanglement, victim stabilization for single and multi-victim situations, hazardous materials incidents, integration of local emergency medical services (EMS) for patient assessment and management, and standard operating procedures to selected victim scenarios. Prerequisites: Basic EMT certification, current enrollment in EMT Basic program, nurse with emergency department experience, or law enforcement personnel, or permission of instructor.
GBS – General Business

GBS103
Principles of Banking
3 credit(s) 3 period(s) lecture
History, characteristics and significance of American banking system, includes types of accounts, banking services and the relationship of commercial banks to their depositors. Prerequisites: None.

GBS110
Human Relations in Business and Industry
3 credit(s) 3 period(s) lecture
Exploration of fundamental theories and concepts of human relations in business and industry. Particular emphasis is placed on developing effective interpersonal relationships and leadership skills within an organization. Prerequisites: None.

GBS114
Principles of Quality Service
3 credit(s) 3 period(s) lecture
Quality service principles in credit/service industries emphasizing total quality and continuous improvement as a model for change. Identifying/understanding customer requirements. mapping a work process, measuring the amount of change in a process' performance and solving work process problems. Collecting data and data analysis. Prerequisites: None.

GBS131
Business Calculations
3 credit(s) 3 period(s) lecture
Review of basic arithmetic and application of mathematics to business problems, includes percentage, interest, discount, and markups. Prerequisites: None.

GBS151
Introduction to Business
3 credit(s) 3 period(s) lecture
Characteristics and activities of current local, national, and international business. An overview of economics, marketing, management and finance. Prerequisites: None.

GBS205
Legal, Ethical, and Regulatory Issues in Business
3 credit(s) 3 period(s) lecture
Legal theories, ethical issues and regulatory climate affecting business policies and decisions. Prerequisites: None.

GBS206
Business Law (UCC)
3 credit(s) 3 period(s) lecture
Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letter of credit, bank deposits, and collections. Prerequisites: None.

GBS207
Business Law (General Corporate)
3 credit(s) 3 period(s) lecture
Legal and ethical aspects of agency, partnerships, corporations, bankruptcy, antitrust, securities, and other regulations of business. Prerequisites: None.

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GBS220
Quantitative Methods in Business
3 credit(s) 3 period(s) lecture
Business applications of quantitative optimization methods in operations management decisions. Prerequisites: (Grade of "C" or better in MAT150, MAT151, or MAT152) or equivalent or satisfactory score on District placement exam.

GBS221
Business Statistics
3 credit(s) 3 period(s) lecture
Business applications of descriptive and inferential statistics, measurement of relationships, and statistical process management. Includes the use of spreadsheet software for business statistical analysis. Prerequisites: Grade of C or better in GBS220 or MAT217.

GBS233
Business Communication
3 credit(s) 3 period(s) lecture
Internal and external business communications, including verbal and nonverbal techniques. Prerequisites: ENG101 or ENG107 with grade of "C" or better, or permission of department/division.

GBS261
Investments I
3 credit(s) 3 period(s) lecture
Various investment forms available, including study of inflation, taxation, government securities, stocks and bonds, real estate and retirement plans. Prerequisites: None.

GBS270AA
Business Internship
1 credit(s) 1 period(s) lab
General business work experience in a business or industry. Eighty hours of designated work per credit per semester. Maximum of 3 credits allowed. Prerequisites: Permission of Department.

GBS270AB
Business Internship
2 credit(s) 2 period(s) lab
General business work experience in a business or industry. Eighty hours of designated work per credit totaling 160 hours per semester. Maximum of 3 credits allowed. Prerequisites: Permission of Department.

GBS270AC
Business Internship
3 credit(s) 3 period(s) lab
General business work experience in a business or industry. Eighty hours of designated work per credit. Prerequisites: Permission of Department or Division. Course Note: GBS270AC may be repeated for a total of six (6) credits.

GBS294
Consumer Credit
3 credit(s) 3 period(s) lecture
Consumer lending by financial institutions. Prerequisites: None.

GBS298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
GCU – Cultural Geography

GCU121
World Geography I: Eastern Hemisphere
3 credit(s) 3 period(s) lecture
Description and analysis of areal variations in social, economic, and political phenomena in major world regions. Emphasis on Europe, the former Russia, North Africa, and the Asian world. Prerequisites: None.

GCU122
World Geography II: Western Hemisphere
3 credit(s) 3 period(s) lecture
Description and analysis of variations in social, economic, and political phenomena in major world regions. Emphasis on Sub-Saharan Africa, Latin America, and Anglo America. Prerequisites: None.

GCU221
Arizona Geography
3 credit(s) 3 period(s) lecture
The historical to modern development of Arizona. The interplay between the physical, cultural and economic factors affecting Arizona today. Prerequisites: None.

GLG – Geology

GLG101 S/L GLG1101
Intro to Geology I - Physical Lecture
3 credit(s) 3 period(s) lecture
A study of the kind and arrangement of materials composing the earth’s crust and the geological processes at work on and within the earth’s surface. Prerequisites: None.

GLG103 S/L GLG1101
Intro to Geology I - Physical Lab
1 credit(s) 3 period(s) lab
May accompany GLG101. Study of common rock-forming minerals, rocks, and maps. Prerequisites: None.

GLG110
Geologic Disasters and the Environment
3 credit(s) 3 period(s) lecture
Acquaints students with the use and importance of geological studies as they apply to the interactions between people and the earth. Includes geological processes and hazards such as floods, earthquakes, and landslides; use of fossil fuels; mining of raw materials. Prerequisites: None.

GLG280
Geology of Arizona Lecture
3 credit(s) 3 period(s) lecture
Acquaints students with the physical and historical geology of Arizona, including the origin of present-day land forms and outstanding modern geologic features and processes now in operation. Prerequisites: None.

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GLG281
Geology of Arizona Lab
1 credit(s) 3 period(s) lab
May accompany GLG280. Examples of specific geologic processes and local areas. May require field trips.  
Prerequisites: None.

GPH – Physical Geography

GPH111
Introduction to Physical Geography
4 credit(s) 6 period(s) lecture + lab
Spatial and functional relationships among climates, landforms, soils, water, and plants. Prerequisites: None.

GPH112
Introduction to Physical Geography
3 credit(s) 3 period(s) lecture
Spatial and functional relationships among climates, landforms, soils, water, and plants. Prerequisites: None.

GPH113
Introduction to Physical Geography Lab
1 credit(s) 3 period(s) lab
Laboratory experience in support of GPH112. Prerequisites or Corequisites: GPH112.

GPH219
Introduction to GIS Using ArcGIS
3 credit(s) 3 period(s) lecture + lab
An introduction to desktop Geographic Information Systems (GIS) technology using ArcGIS software. Prerequisites: CIS105 or CSC180 or permission of instructor.

GTC – General Technology

GTC121
Construction Estimating I
3 credit(s) 3 period(s) lecture
Fundamentals of determining quantities of material, equipment and labor for given project. Includes procedures used in applying proper unit costs to these items. Prerequisites: None.

GTC123
Construction Estimating II
3 credit(s) 3 period(s) lecture
Details of job estimates. Includes unit cost considerations and subcontracting. Emphasis on bid preparation. Prerequisites: GTC121 or departmental permission.

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Revised: 9/2/2011; 10/28/11; 12/7/11
HCC – Health Core Curriculum

HCC130
Fundamentals in Health Care Delivery
3 credit(s) 3 period(s) lecture
Overview of current health care professions including career and labor market information. Health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate teamwork in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote teamwork. Focus on intercultural communication strategies. **Prerequisites:** None.

HCC145
Medical Terminology for Health Care Workers
3 credit(s) 3 period(s) lecture
Medical terminology used in health care, with special care populations and in special services. Body systems approach to terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing terms using word parts. Medical abbreviations and symbols and term spelling. **Prerequisites:** None.

HCC145AA
Medical Terminology for Health Care Workers I
1 credit(s) 1 period(s) lecture
Introduction to medical terms used in health care. Body systems approach to selected terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing terms using basic word parts. Selected medical abbreviations and symbols and term spelling. **Prerequisites:** None.

HCC164
Pharmacology for Allied Health
0.5 credit(s) 0.5 period(s) lecture
Chemical, generic, and trade names for drugs. Use of drug references. Pharmacological principles of drugs. Routes of drug administration. Federal and Arizona regulations. Classification of drugs. Abbreviations and symbols for drug measurement, administration, and prescription. **Prerequisites:** HCC130 or (HCC130AA, HCC130AB, HCC130AC, HCC130AD, HCC130AE and HCC130AF), or equivalent.

HCC204
Clinical Pathophysiology
3 credit(s) 3 period(s) lecture
Causes of disease and their impact on the human body. Common physiologic effects of disease on body systems. Roles of the multidisciplinary health care team in the diagnosis and treatment of disease. Cultural implications in prevention and treatment of disease. **Prerequisites:** HCC130 or (HCC130AA, HCC130AB, HCC130AC, HCC130AD, HCC130AE and HCC130AF), or equivalent and (BIO160 or BIO201).

HCC208
Health Care Leadership
1 credit(s) 1 period(s) lecture
Introduction to concepts and skills required of health care leaders. Discussion of leadership styles and conflict management. Application of motivation, delegation, and communication techniques to teamwork and leadership. **Prerequisites:** HCC130 or (HCC130AA, HCC130AB, HCC130AC, HCC130AD, HCC130AE and HCC130AF), or equivalent.

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HCE – Health Care Education

HCE101
Customer and Patient Relations
1.5 credit(s) 1.5 period(s) lecture
Basic interpersonal behavior principles in the health care setting. Emphasis on interpersonal behavior and mental health concepts. Examines management perspective and self-management skills. **Prerequisites:** None.

HCE102
Orientation to the Physiology and Psychology of Body Systems
1 credit(s) 1 period(s) lecture
Application of basic physiology and psychology of body systems as they relate to an entry-level health care professional’s role. **Prerequisites:** Acceptance into the Medical Assisting program or permission of Program Director. **Corequisites:** HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE108
Basic Phlebotomy: Training for Law Enforcement Officers
1 credit(s) 1.5 period(s) lecture + lab
Theory and practice of basic phlebotomy techniques including equipment, procedures, and protocol for handling specimens drawn for testing for law enforcement purposes. **Prerequisites:** Certified Law Enforcement Officer. **Corequisites:** HCE110AA.

HCE109
Phlebotomy: Basic Skills
1 credit(s) 2 period(s) lecture + lab
Theory and practice of basic phlebotomy including laboratory test codes, equipment, and procedures. **Prerequisites:** Acceptance into the Laboratory Assisting or Medical Assisting or Patient Care Technician or Phlebotomy program, or permission of Program Director. **Corequisites:** HCC130 and HCC145AA, or permission of Program Director.

HCE110
Practicum: Fundamental Phlebotomy Skills
0.5 credit(s) 3 period(s) lab
Application of fundamental phlebotomy techniques in a clinical laboratory setting or health care environment. **Prerequisites:** HCE109, submit to a drug screening and demonstrate negative results, and acceptance into the Laboratory Assisting or Medical Assisting or Patient Care Technician or Phlebotomy program, or permission of Program Director.

HCE110AA
Practicum: Basic Phlebotomy: Training for Law Enforcement Officers
1.0 credit(s) 2.0 period(s) lab
Application of basic phlebotomy techniques in a clinical laboratory setting or health care environment for law enforcement purposes. **Prerequisites:** Certified Law Enforcement Officer. **Corequisites:** HCE108.

HCE111
Specimen Processing and Advanced Techniques in Phlebotomy Procedures
1 credit(s) 2 period(s) lecture + lab
Theory and practice of advanced techniques in phlebotomy and specimen processing including laboratory test codes, equipment, and procedures. **Prerequisites:** HCE109 or permission of instructor.

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HCE112
Practicum: Specialized Phlebotomy Techniques
0.5 credit(s) 3 period(s) lab
Application of specialized phlebotomy techniques in a clinical laboratory setting or health care environment. Prerequisites: HCE109. Prerequisites or Corequisites: HCE110 and HCE111, or permission of instructor.

HCE114
Refresher Course for Phlebotomists
0.5 credit(s) 0.75 period(s) lecture + lab
Review of phlebotomy theory and practices including equipment, procedures, and special considerations. Reinforces basic skills and competencies of phlebotomy techniques for trained phlebotomists currently working in the field. Prerequisites: Must be currently employed as a phlebotomist or permission of the Program Director. Course Note: HCE114 can be repeated for credit.

HCE120
Phlebotomy Practicum
1 credit(s) 4.5 period(s) lab
Application of phlebotomy techniques in a clinical laboratory setting or health care environment. Prerequisites: HCE109, or permission of Program Director. Corequisites: HCE111, or permission of Program Director.

HCE121
Practicum: Basic Specimen Processing
1.5 credit(s) 6 period(s) lab
Application of specimen processing techniques in a clinical laboratory setting or health care environment. Prerequisites: HCE109 or permission of instructor.

HCE122
Practicum: Phlebotomy and Specimen Processing
2.5 credit(s) 9 period(s) lab
Application of phlebotomy and specimen processing techniques in a clinical laboratory setting or health care environment. Prerequisites: HCE109 or permission of Program Director. Prerequisites or Corequisites: HCE111 or permission of Program Director.

HCE148
Exercise Testing
0.5 credit(s) 1.5 period(s) lecture + lab
Study of exercise testing principles as performed under the supervision of a physician. Prerequisites: HCC109 or permission of program coordinator. Corequisites: HCE140 or permission of program coordinator.

HCE162
Aseptic Techniques
1 credit(s) 3 period(s) lecture + lab
Fundamentals of microbial control. Includes procedures for sanitation, disinfection, and sterilization. Specimen collection and handling. Compliance with Occupational Health and Safety Administration (OSHA), the United States Center for Communicable Disease Control (CDC), and Clinical Laboratory Improvement Amendments (CLIA). Prerequisites: Acceptance into the Medical Assisting program or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE167
Laboratory Testing in Patient Care
Service Centers
1 credit(s) 1.5 period(s) lecture + lab
Basic Point of Care testing in a clinical setting. Includes procedures for urinalysis, whole blood hematology, glucose monitoring, cholesterol and coagulation testing. Specimen collection and handling. Compliance with Occupational Health and Safety Administration (OSHA) and the Clinical Laboratory Improvement Amendments (CLIA) regulations. Prerequisites: HCE162 and acceptance into the Medical Assisting program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

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HCE221
Administration of Medication
3 credit(s) 4 period(s) lecture + lab
Principles and procedures for administering medications. Includes classifications, uses, effects, legal regulations, calculating dosages, and correct terminology. Emphasis on oral and parenteral drug administration. Prerequisites: HCE167, HCE222, and acceptance into the Medical Assisting program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE222
Clinical Procedures
3 credit(s) 4 period(s) lecture + lab
Principles and procedures for the medical assistant. Methods of assisting clinicians with physical examinations, procedures, treatments, and minor surgical procedures in the medical office. Includes vital signs, height, and weight, collection of patient data and documentation. Prerequisites: HCE162 and acceptance into the Medical Assisting program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE226
Administrative Procedures
3 credit(s) 3 period(s) lecture
Principles and procedures for front office administrative skills. Methods of telephone management, correspondence and mail processing, appointment scheduling, medical records management and data collection. Includes medical assistant as office manager. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE227
Insurance, Billing and Coding
3 credit(s) 3 period(s) lecture + lab
Application of insurance, coding and billing. Includes legal and ethical issues, federal, state and private insurance claims, procedural and diagnostic coding, and banking and accounting principles. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE229
Automated Computer System for Medical Office Management
2 credit(s) 4 period(s) lecture + lab
Principles and procedures in using an office automated computerized system for entering patient information and tracking patient billing, including basic computer navigation skills and use of accounting cycle from originating data to closing ledger entries. Prerequisites: Acceptance into the Medical Assisting or Medical Front Office or Medical Office Support or Medical Office Support: Basic Clerical program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE251
Emergencies in the Medical Office
1.5 credit(s) 1.5 period(s) lecture + lab
Emphasis on methods of identification and response to emergencies in a medical office. Prerequisites: HCE162 and acceptance into the Medical Assisting program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

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HCE261
Applied EKG
1 credit(s) 1.5 period(s) lecture + lab
Entry-level training to professionally perform, process, and explain the electrocardiogram. Overview of cardiac anatomy, physiology, and conduction systems. Overview of commonly encountered drugs in cardiac medicine. Data collection, selection, processing, and presentation for the appropriate medical/clinical professional to review. Selected specific non-invasive cardiac testing procedures. Prerequisites: Acceptance into the Medical Assisting or Patient Care Technician program, or permission of Program Director. Corequisites: HCC130 and (HCC145, or HCC145AA, HCC145AB, and HCC145AC), or permission of Program Director.

HCE271
Patient Care Technician Skills
1 credit(s) 1.75 period(s) lecture + lab
Designed to prepare students for advanced patient care skills. Fundamentals in microorganisms and microbial control. Specimen collection, handling and testing, wound care, catheterization, and other designated procedures. Prerequisites: Acceptance into the Patient Care Technician program or permission of Program Director.

HCE272
Practicum: Patient Care Technician
1 credit(s) 4.75 period(s) lab
Designed to provide clinical experience in the medical facility. Emphasis on application of advanced patient-care skills. Includes incorporation of new skills into a work assignment and development of working relationships in an expanded role. Prerequisites: HCE109, HCE261, HCE271, current CPR card for Health Care Provider, proof of immunity and health declaration form signed by a licensed health care provider, proof of negative results to a drug screening, and current fingerprinting clearance card, or permission of Program Director. Course Note: CPR card must remain current throughout the HCE272 externship/practicum.

HCE274
Administrative Medical Assisting Externship
1 credit(s) 6 period(s) lab
Practicum in administrative medical assisting. Application of administrative duties, procedures, and knowledge derived from medical assisting courses. Prerequisites: HCC130, (HCC145, or HCC145AA, HCC145AB, and HCC145AC), HCE226, HCE227, HCE/BPC229, submit to a drug screening and demonstrate negative results, acceptance into the Medical Assisting or Medical Front Office program, and permission of Program Director. Course Note: CPR card must remain current throughout the HCE274 externship/practicum.

HCE275
Clinical Medical Assisting Externship
2 credit(s) 9.6 period(s) lab
Practicum in clinical medical assisting. Application of clinical skills, procedures, and knowledge derived from medical assisting courses. Prerequisites: HCC130, (HCC145 or equivalent), HCE102, HCE109, HCE110, HCE162, HCE167, HCE221, HCE222, HCE226, HCE227, BPC/HCE229, HCE251, HCE261, acceptance into the Medical Assisting program, negative results on drug screening, and permission of Program Director. Corequisites: HCE280 or permission of Program Director. Course Note: CPR card must remain current throughout the HCE275 externship/practicum.

HCE280
Medical Assisting Program Review
1 credit(s) 1 period(s) lecture
Preparation for the medical assisting national certification examinations. Topics include medical terminology, anatomy and physiology, medical records management, appointment scheduling, law and ethics, insurance billing and coding, medication administration, electrocardiography, patient assessment, asepsis, clinical procedures, and laboratory techniques and values. Prerequisites: HCE102, HCE109, HCE110, HCE162, HCE167, HCE221, HCE222, HCE226, HCE227, BPC/HCE229, HCE251, HCE261, and acceptance into the Medical Assisting program, or (current employment with minimum 1 year experience as Medical Assistant), or permission of Program Director. Corequisites: HCE274 and HCE275 or equivalent, or permission of Program Director.

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HCE281
Specialty Office Practices
1.5 credit(s) 1.5 period(s) lecture + lab
Designed to meet the needs of medical assistants working in the offices of licensed Arizona osteopathic physicians and who perform basic therapeutic treatments and procedures on clients. Prerequisites: None.

HCE283
Advanced Concepts for Specialty Office Practice
4 credit(s) 4 period(s) lecture + lab
Designed to meet the needs of medical assistants who work in the offices of licensed Arizona osteopathic physicians and who perform basic therapeutic treatments and procedures on clients. A critical overview of techniques, procedures, and policies affecting medical assistants in practice. Update on current methods, validation of knowledge and experience, and introduction to new procedures in a clinical setting. Prerequisites: HCE281 or permission of instructor.

HCR – Health Care Related

HCR210
Clinical Health Care Ethics
3 credit(s) 3 period(s) lecture
An introduction to health care ethics with emphasis on analysis and ethical decision making at both the clinical and health policy levels for health care professionals. Theoretical foundation of bioethics reviewed within historical and contemporary contexts. Prerequisites: ENG102.

HCR220
Introduction to Nursing and Health Care Systems
3 credit(s) 3 period(s) lecture
Introduction to the social, political, and economic contexts of the nursing profession and health care systems in the United States. Prerequisites: Grade of "C" or better in ENG102 or ENG108.

HCR230
Culture and Health
3 credit(s) 3 period(s) lecture
Relation between cultures of diverse groups and health/illness. Emphasis on cross-cultural communication, including awareness of own cultural influences and indigenous and complementary healing practices. Prerequisites: None.

HCR240
Human Pathophysiology
4 credit(s) 4 period(s) lecture
Chemical, biological, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: BIO202 or BIO205 or equivalent.

HCR240AA
Human Pathophysiology I
2 credit(s) 2 period(s) lecture
Chemical, biologic, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: BIO202 or BIO205 or equivalent. Corequisites: HCR240AB or permission of instructor.

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HCR240AB
Human Pathophysiology II
2 credit(s) 2 period(s) lecture
Chemical, biologic, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: BIO202 or BIO205 or equivalent. Corequisites: HCR240AA or permission of instructor.

HES – Health Science

HES100
Healthful Living
3 credit(s) 3 period(s) lecture
Health and wellness and their application to an optimal lifestyle. Explores current topics of interest such as stress management, nutrition, fitness, and environmental health. Evaluates common risk factors associated with modern lifestyles. Prerequisites: None.

HES126
Women’s Health Issues
3 credit(s) 3 period(s) lecture
Develops awareness of women’s health issues across cultures, lifespan, socioeconomic status, education and addresses global concerns and inequalities. The course introduces women’s health issues through the history of the Women’s Health Movement and the political climate and economic systems in the United States. Addresses women’s health issues regarding sexual health and reproduction and examines many chronic diseases common to women. Explores predisposing and precipitating factors affecting women’s health and reviews current treatment of disease. Identifies interpersonal and social issues related to women’s health and focuses on the development of behaviors that promote a healthy and productive life. Prerequisites: None.

HES154
First Aid/ Cardiopulmonary Resuscitation
3 credit(s) 3 period(s) lecture
Cardiopulmonary Resuscitation and first aid for the adult, child and infant patient, includes Automated External Defibrillator (AED), rescue breathing, obstructed airway, and other first aid procedures. Designed to train citizen responders in skills and procedures required during emergency situation. Prerequisites: None.

HES201
Substance Abuse and Behavior
3 credit(s) 3 period(s) lecture
Principles and factual bases of drug use and abuse. Physiological and socio-psychological effects of drug use and law enforcement of drug abuse. Consultants used extensively to enrich course. Prerequisites: None.

HES210
Making Healthy Decisions: HIV/AIDS
1 credit(s) 1 period(s) lecture
HIV transmission and infection; AIDS-related diseases; prevention resources; effects of HIV/AIDS on society and health care system. Prerequisites: None.

HES271
Prevention and Treatment of Athletic Injuries
3 credit(s) 3 period(s) lecture
Prevention and care of athletic injuries, emphasizing use of modern training techniques and support materials. Utilization of preventive taping, strapping, bandaging, cardiopulmonary resuscitation, massage, cryotherapy, hydrotherapy, and practical application of muscle reconditioning. Prerequisites: None.

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HES272
Clinical Practicum in Athletic Training
1 credit(s)  7.5 period(s) lab
Practical application, in a clinical setting and under direct supervision, of methods and techniques of treatment of athletic injuries. **Prerequisites:** HES271.

HES273
Athletic Training: Advanced Wrapping and Taping Techniques
2 credit(s)  2 period(s) lecture
Expands and enhances practical uses of basic taping and wrapping skills. Hands-on experience in the use of braces, athletic taping, and elastic wraps to care for athletic injuries. **Prerequisites:** HES271 or permission of instructor.

HIM – Health Information Management

HIM101
Introduction to Health Information Management
1 credit(s)  1 period(s) lecture
Detailed investigation of the history and development of the health information management profession. Career opportunities, ethics, history, and functions of the health information management profession in relationship to the healthcare delivery system. Overview of health information systems used to identify, file, and store patient health information. **Prerequisites:** HCC130 or permission of Program Director.

HIM105
Computers in Healthcare and Health Record Systems
2 credit(s)  2 period(s) lecture
Introduction to computer applications in healthcare settings including electronic health records, health record content, structure, and origin of clinical information for various healthcare settings. A basic review of federal, state, and organizational documentation guidelines. Legal and ethical issues applicable to health information documentation and coding practices. **Prerequisites:** HCC130 or permission of Program Director.

HIM106
Legal Aspects of Health Information Management
3 credit(s)  3 period(s) lecture
Legal aspects of health records and health information, management. Application of general principles of law as related to health information management. Emphasis on regulations regarding protected health information, patient privacy, and patient confidentiality. Types of patient authorizations and procedures for access and release of protected health information. **Prerequisites:** HCC130 or permission of Program Director.

HIM140
Acute Care Documentation and Standards
2 credit(s)  3 period(s) lecture + lab
A comprehensive review of acute care hospital health records. Study of the origination, development, content, flow, and format of acute care records. Documentation standards and chart analysis guidelines specific to accreditation standards, state licensing, and Medicare certification requirements. **Prerequisites:** HCC130 or permission of Program Director.  
**Prerequisites or Corequisites:** HIM 101 or permission of Program Director.

HIM150
Health Care Data
2 credit(s)  3 period(s) lecture + lab
Introduction to data collection methods for health information systems including structure, content, and standards. Study of the datasets and databases used in various health care settings. Overview of the creation and maintenance of health information disease registries and indexes. **Prerequisites:** [HIM140 and (BPC110 or CIS105)], or permission of Program Director.

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**HIM180**

**Introduction to Medical Billing and Reimbursement**

*2 credit(s) 2 period(s) lecture*

An overview of the medical billing profession, the claims process, and federal billing guidelines. Study of major medical third-party payers including coverage offered, client eligibility, and reimbursement methodologies. **Prerequisites:** HCC130 or permission of Program Director.

**HIM181**

**Medical Claims Processing**

*3 credit(s) 5 period(s) lecture + lab*

Application of third-party payer billing information to claims processing in the non-hospital setting. Use of the computer for claims submission. Management of claims to ensure confidentiality, data retention, and successful payment for services. **Prerequisites:** (BPC110, HIM180, and HIM209), or permission of Program Director. **Prerequisites or Corequisites:** HIM214, or permission of Program Director.

**HIM201**

**Health Information Statistics and Research**

*2 credit(s) 4 period(s) lecture + lab*

Compilation and usage of various types of administrative and health care statistics including vital records. Introduction to the health information research process and institutional review board functions. Use of computers for computation and data display. **Prerequisites:** [(BPC110 or CIS105), HIM140, and MAT102], or permission of Program Director.

**HIM204**

**Cancer Registry**

*4 credit(s) 6 period(s) lecture + lab*

Requirements for managing a cancer registry, including comparisons of systems and data related to a hospital and central cancer registry and other registry standard-setting organizations. Organization and management of the basic functions of cancer registry operations. Analysis and presentation of cancer data and use in studies. **Prerequisites:** HCC145 or permission of instructor. **Corequisites:** (BIO202 and HIM150) or permission of instructor.

**HIM206**

**Health Information Management in Alternative Care Settings**

*2 credit(s) 3 period(s) lecture + lab*

Characteristics of non-acute care organizations in the United States. Standards and regulations for health records in those settings according to state, federal, and accrediting agencies. Applicable health record content and health information practices. **Prerequisites:** HIM140 or permission of Program Director.

**HIM207**

**Health Information Organizational Resource Management**

*2 credit(s) 2 period(s) lecture*

Principles and practices essential to the efficient use of human, financial, and physical resources within health information systems. Focus on roles and responsibilities applicable to practice as a health information team performing planning, organizing, directing, and controlling functions. **Prerequisites:** (HIM150 and HIM206), or permission of Program Director.

**HIM209**

**ICD Coding**

*4 credit(s) 6 period(s) lecture + lab*

International Classification of Diseases (ICD) code assignment. Use of appropriate coding guidelines and federal, state, and local compliance standards for diagnoses and procedures. Application of diagnostic and procedural codes for inpatient, outpatient, and ambulatory settings. Introduction of references and software to assist in code assignment. **Prerequisites:** [HCC145 and (BIO160 or BIO201)], or permission of Program Director. **Prerequisites or Corequisites:** HCC204 or permission of Program Director.

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HIM211
Advanced Applications of Coding and Reimbursement
4 credit(s) 6 period(s) lecture + lab
Use of references, source documents, and computers for International Classification of Diseases (ICD) code assignment. Uniform Hospital Discharge Data Set and diagnostic-related group guidelines and federal regulations for hospital-based settings. Coding guidelines, code sets, and code assignment for home health, long term care, rehabilitation, and other health care settings. Identification of care provider documentation that supports code assignment. Use of codes for administrative purposes, reimbursement, marketing, and meeting regulatory requirements. Prerequisites: (BIO202, HCC204, and HIM209), or permission of Program Director.

HIM212
CPT Coding I
2 credit(s) 4 period(s) lecture + lab
Introduction to Current Procedural Terminology (CPT) from both facility and physician perspectives. General content, coding guidelines, and the role in healthcare reimbursement. Coding of basic medical and surgical services including use of modifiers. Ethical coding and compliance issues. Prerequisites: (HCC145 and (BIO160 or BIO201)), or permission of Program Director. Prerequisites or Corequisites: HIM204, or permission of Program Director.

HIM214
CPT Coding II
2 credit(s) 4 period(s) lecture + lab

HIM215
Physician-Based Billing and Coding Seminar
1 credit(s) 0.5 period(s) lecture
Content and development of physician-based services billing and coding compliance programs. Forum for discussion of classroom, laboratory, and professional practice experiences. Prerequisites: (HCC204, HIM209, and HIM212), or permission of Program Director. Corequisites: HIM214 and HIM216, or permission of Program Director.

HIM216
Professional Practice in Physician-Based Billing and Coding
1 credit(s) 5 period(s) lab

HIM217
Health Information Management Seminar I
1 credit(s) 1 period(s) lecture
Theory of and practice in specialized health information activities. Forum for discussion of classroom, laboratory, and clinical affiliation experiences. Prerequisites: (HIM106, HIM150, HIM201, and HIM206), or permission of Program Director. Corequisites: HIM218 or permission of Program Director.

HIM218
Professional Practice
1 credit(s) 5 period(s) lab
Practical application of acquired health information technical knowledge in health care settings. Prerequisites: (HIM106, HIM150, HIM201, and HIM206), and permission of Program Director. Corequisites: HIM217 or permission of Program Director.

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HIM219
Health Information Management Systems
3 credit(s) 5 period(s) lecture + lab
Overview of the fundamental concepts, terminology, and structure of health information systems with emphasis on computer applications used to manage electronic health information. Review of electronic health information concepts and its impact on health care delivery in multiple settings. **Prerequisites:** HIM150 or permission of Program Director.

HIM220
Health Information Management Seminar II
1 credit(s) 1 period(s) lecture
Survey of current practices and trends in health information management. Application of problem solving and research concepts to health information practices. Professional development preparation and career opportunities for health information management professionals. **Prerequisites:** (HIM207, HIM217, HIM218, and HIM219), or permission of Program Director. **Corequisites:** HIM224 or permission of Program Director.

HIM221
Medical Coding Seminar
0.5 credit(s) 0.5 period(s) lecture
Content and development of coding compliance programs. Forum for discussion of classroom, laboratory, and professional practice experience. **Prerequisites:** HIM214 and permission of Program Director. **Corequisites:** HIM222 or permission of Program Director.

HIM222
Professional Practice in Medical Coding
1 credit(s) 5 period(s) lab
Practical application of coding guidelines for medical coding. Use of the International Classification of Diseases and Current Procedural Terminology systems to code patient services. **Prerequisites:** HIM214 and permission of Program Director. **Corequisites:** HIM221 or permission of Program Director.

HIM224
Advanced Professional Practice
1 credit(s) 5 period(s) lab
Practical application of advanced health information management knowledge in a variety of health-related settings. Focus on supervision and management, interdepartmental policies and procedures, budget and staffing considerations, as well as committee planning and preparation. **Prerequisites:** (HIM207, HIM217, HIM218, and HIM219), and permission of Program Director. **Corequisites:** HIM220 or permission of Program Director.

HIM230
Quality Management and Performance Improvement
2 credit(s) 2 period(s) lecture
Focus on the history and development of quality assurance in various health care facilities, including quality assessment techniques, utilization management, risk management, credentialing, and medical staff services as related to health information management. **Prerequisites:** (HIM207 and HIM219), or permission of Program Director.

HIM295AA
Coding for Health Information Management Professionals
1 credit(s) 1 period(s) lecture
Current coding applications for established coding classification system(s). Includes the coding of diseases and operations/procedures. Use of the classification system(s) for reimbursement. **Prerequisites:** Certification as a Registered Health Information Administrator (RHIA) or Registered Health Information Technician (RHIT) or current coding credential or equivalent training/experience. **Course Note:** HIM295AA may be repeated for a total of six (6) credits.

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HIM295AB  
Coding for Health Information Management Professionals  
2 credit(s) 2 period(s) lecture  
Current coding applications for established coding classification system(s). Includes the coding of diseases and operations/procedures. Use of the classification system(s) for reimbursement. **Prerequisites:** Certification as a Registered Health Information Administrator (RHIA) or Registered Health Information Technician (RHIT) or current coding credential or equivalent training/experience. **Course Note:** HIM295AB may be repeated for a total of six (6) credits.

HIM295AC  
Coding for Health Information Management Professionals  
3 credit(s) 3 period(s) lecture  
Current coding applications for established coding classification system(s). Includes the coding of diseases and operations/procedures. Use of the classification system(s) for reimbursement. **Prerequisites:** Certification as a Registered Health Information Administrator (RHIA) or Registered Health Information Technician (RHIT) or current coding credential or equivalent training/experience. **Course Note:** HIM295AC may be repeated for a total of six (6) credits.

HIM298AA-AC  
Special Projects  
1-3 credit(s) 1-3 period(s) lab  
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. **Prerequisites:** Permission of Program Director or instructor.

HIS – History

**HIS100**  
History of Western Civilization to Middle Ages  
3 credit(s) 3 period(s) lecture  
Survey of the origin and development of Western civilization and its institutions from prehistory through the Ancient World and the Middle Ages. **Prerequisites:** None.

**HIS101**  
History of Western Civilization Middle Ages to 1789  
3 credit(s) 3 period(s) lecture  
Survey of origin and development of Western civilization and its institutions from the Renaissance and Reformation through the Age of Enlightenment. **Prerequisites:** None.

**HIS102**  
History of Western Civilization 1789 to Present  
3 credit(s) 3 period(s) lecture  
Survey of the origin and development of Western civilization and its institutions from French Revolution through the present. **Prerequisites:** None.

**HIS103**  
United States History to 1865  
3 credit(s) 3 period(s) lecture  
The political, economic, and social development of the United States from the Pre-Columbian period through the end of the Civil War (1865). **Prerequisites:** None.

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HIS104  
United States History 1865 to Present  
3 credit(s) 3 period(s) lecture  
The political, economic, and social development of United States from 1865 to the present time. **Prerequisites:** None.

HIS105  
Arizona History  
3 credit(s) 3 period(s) lecture  
The prehistoric and contemporary Native American experience, Spanish colonial times, the Mexican National period, the U.S. federal territorial years, and Arizona’s political and economic development during the twentieth century. **Prerequisites:** None.

HIS106  
Southwest History  
3 credit(s) 3 period(s) lecture  
Survey of Hispanic, Anglo, African-American and Native cultures of the peoples who have settled the American Southwest. Emphasis on cattle, mining, fur trade and transportation industries and role development of the region. **Prerequisites:** None.

HIS108  
United States History 1945 to the Present  
3 credit(s) 3 period(s) lecture  
Survey of American history from 1945 to the present. Focuses on the political, social, economic and cultural history of the United States from the end of World War II to the present time. Includes domestic developments and foreign policy. **Prerequisites:** None.

HIS109  
Mexican-American History and Culture  
3 credit(s) 3 period(s) lecture  
Examination of origins and development of the Spanish-American and Mexican-American peoples and their contribution to the culture, history and development of United States. Emphasis on Mexican-American War and its impact on educational, social, and economic conditions of the Mexican-Americans of the southwest. **Prerequisites:** None.

HIS145  
History of Mexico  
3 credit(s) 3 period(s) lecture  
Survey of the political, economic, and social forces which have shaped the development of Mexico from Pre-Columbian times to the present. **Prerequisites:** None.

HIS/AIS170  
American Indian History of the Southwest  
3 credit(s) 3 period(s) lecture  
Covers history of Indian peoples in the southwestern United States from pre-Columbian era to the present. Includes historical events, the development and implementation of Spanish-Mexican and United States’ policies and their impact on Indian peoples in these areas, and current issues of importance to Indian peoples. **Prerequisites:** None.

HIS203  
African-American History to 1865  
3 credit(s) 3 period(s) lecture  
History and cultural heritage of African-Americans from their beginnings in Ancient Africa through the experience of chattel slavery in the Americas to their eventual emancipation and participation in the American Civil War. **Prerequisites:** None.

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HIS209
The Chicano in 20th Century America
3 credit(s) 3 period(s) lecture
Analysis of the twentieth century experience. Historical perspective of the emergence of Chicanos as an influential minority in the United States. Prerequisites: None.

HST – Histologic Technology

HST170
Overview of Histology
(Anatomic) Laboratory
1 credit(s) 1 period(s) lecture
Overview of anatomic laboratory services, anatomic laboratory professionals, and the role of the histology technician. Emphasis on certification, accreditation, and regulatory agencies. Application of process improvement, quality control, laboratory mathematics, infection control, sharps/mechanical hazards, documentation, medico-legal implications, and chemical hygiene principles. Includes information management in anatomic laboratories. Importance of management and supervision leadership principles and professional growth and ethical conduct. Prerequisites: Admission to Histologic Technology Program or permission of program director. Corequisites: HST171 and HST172.

HST171
Chemistry of Fixation
2 credit(s) 2 period(s) lecture
Principles of fixation and fixative solutions. Anatomic laboratory instrumentation and specimen handling, identification, and tracking protocols. Emphasis on gross examination processes, tissue processing protocols, and specialized processing techniques. Prerequisites: Admission to Histologic Technology Program or permission of program director. Corequisites: HST170 and HST172.

HST172
Practicum: Chemistry of Fixation
3 credit(s) 6 period(s) lab
Practicum in histology techniques performed in an anatomic laboratory. Application of clinical skills for specimen handling, identification, and tracking protocols. Use of anatomic laboratory instrumentation. Study of gross examination protocols. Demonstration of fixation techniques, paraffin processing protocols, and specialized processing techniques. Performance of clerical and computer functions using medico-legal guidelines for documentation. Use of professional and ethical conduct in all interpersonal communications. Prerequisites: Admission to Histologic Technology Program or permission of program director. Corequisites: HST170 and HST171.

HST173
Microtomy
3 credit(s) 3 period(s) lecture

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HST174
Practicum: Microtomy
3 credit(s) 6 period(s) lab
Practicum in histology techniques performed in an anatomic laboratory. Use of decalcification and frozen section techniques. Includes embedding orientation by tissue type and ergonomic safety practices for microtomy. Procedures for the paraffin embedding station, cryostat and rotary microtome set-up and maintenance, and sharps safety practices for the microtome. Emphasis on techniques for microtomy, specialized microtomy, frozen section, and cytology specimen preparation. Prerequisites: HST172. Corequisites: HST173.

HST175
Cellular Biological Staining
3 credit(s) 3 period(s) lecture

HST176
Practicum: Cellular Biological Staining
3 credit(s) 6 period(s) lab
Practicum in histology techniques performed in an anatomic laboratory. Recognition of basic cellular structure, carbohydrate structures, connective tissue, lipid structures, and pigments and minerals in tissues. Application of chemical staining. Emphasis on stains for nuclear and cytoplasmic structures, carbohydrates and lipids, connective tissue, and tissue pigments and minerals stains. Prerequisites: HST173 and HST174. Corequisites: HST175.

HST177
Cellular Biological and Immunohistochemical Staining
3 credit(s) 3 period(s) lecture

HST178
Practicum: Cellular Biological and Immunohistochemical Staining
3 credit(s) 6 period(s) lab

HUM – Humanities

HUM105AA
Cultural Perspectives: African
Ideas and Values
1 credit(s) 1 period(s) lecture
An interdisciplinary examination of the history, arts, ideas, and values of African peoples and their contribution to life in the United States. Prerequisites: None.
HUM105AB
Cultural Perspectives: Native-American Ideas and Values
1 credit(s) 1 period(s) lecture
An interdisciplinary examination of the history, arts, ideas, and values of Native Americans and their contribution to life in the United States. Prerequisites: None.

HUM105AC
Cultural Perspectives: Asian Ideas and Values
1 credit(s) 1 period(s) lecture
An interdisciplinary examination of the history, arts, ideas, and values of Asian peoples and their contribution to life in the United States. Prerequisites: None.

HUM105AD
Cultural Perspectives: Hispanic Ideas and Values
1 credit(s) 1 period(s) lecture
An interdisciplinary examination of the history, arts, ideas, and values of Hispanic peoples and their contribution to life in the United States. Prerequisites: None.

HUM105AE
Cultural Perspectives: Middle-Eastern Ideas and Values
1 credit(s) 1 period(s) lecture
An interdisciplinary examination of the history, arts, ideas, and values of Middle Eastern peoples and their contribution to life in the United States. Prerequisites: None.

HUM108
Contemporary Humanities
3 credit(s) 3 period(s) lecture
An exploration of human expression in contemporary arts and sciences. Prerequisites: None.

HUM120
Cultural Viewpoints in the Arts
3 credit(s) 3 period(s) lecture
Introduction to the influence of culture and ethnicity on the artist, including factors such as race, religion, gender, class, sexual preference, age, and region. Lecture and discussion on various art forms, including literature, visual arts, music, dance, film, and theater. Prerequisites: None.

HUM125
The Urban Experience
3 credit(s) 3 period(s) lecture
Examines the urban experiences’ representation in and influence on the arts; considers such subjects as the physical environment of the city, language, ethnic diversity, values, perception of time and space, relationship between the individual and the community. Lecture and discussion on various art forms, including literature, visual arts, music, dance, film, and theater. Prerequisites: None.

HUM190AA-AJ
Honors Forum
1 credit(s) 1 period(s) lecture
Interdisciplinary studies of selected issues confronting the individual and society. Formal lectures followed by informal discussions with outstanding scholars and social leaders. Supplemented by readings and pre- and post-forum discussion and critique. Varied content from module to module due to changing forum themes and issues. Prerequisites: Admission to the College Honors Program or permission of instructor.

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HUM202
Humanities: Universal Themes
3 credit(s) 3 period(s) lecture
The hero/heroine; fool; the social world, and the future as themes in the humanities. Prerequisites: None.

HUM/THE205
Introduction to Cinema
3 credit(s) 3 period(s) lecture
Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. Prerequisites: None.

HUM208
Arts and World Views of the Southwest
3 credit(s) 3 period(s) lecture
Examination of arts, ideas, and values of the Southwest and their connection to a larger humanistic world view. Analysis of cultural, environmental, and historical factors as they influence creative expressions. Emphasis on critique of artistic expressions from both cultural and aesthetic perspectives. Prerequisites: CRE101 or permission of instructor.

HUM/WST209
Women and Films
3 credit(s) 3 period(s) lecture
Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None.

HUM/THE210
Contemporary Cinema
3 credit(s) 3 period(s) lecture
A study of contemporary films, directors, and critics with emphasis on evaluating films as an art form. Prerequisites: None.

HUM212
Documentary Film
3 credit(s) 3 period(s) lecture
Survey of documentary (non-fiction) film with an emphasis on international issues. Focus on primary types of documentary film, including direct address, direct cinema, interviews, etc. Prerequisites: None.

HUM213
Hispanic Film
3 credit(s) 3 period(s) lecture
Analysis of Hispanic film as art form and as social commentary. Prerequisites: None.

HUM250
Ideas and Values in the Humanities
3 credit(s) 3 period(s) lecture
An historical analysis of the interrelationships of art, architecture, literature, music, and philosophy from the early civilizations to the Renaissance, including western and non-western cultures. Prerequisites: ENG101.

HUM251
Ideas and Values in the Humanities
3 credit(s) 3 period(s) lecture
An historical analysis of the interrelationships of art, architecture, literature, music, and philosophy from the Renaissance to modern period, including Western and non-Western cultures. Prerequisites: ENG101.

HUM260
Intercultural Perspectives
3 credit(s) 3 period(s) lecture
Cultural, literary, and artistic expressions of Native, Hispanic, and African Americans. Includes traditional and modern work and contribution to American civilization. Prerequisites: None.

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HUM/EDU/STO292
The Art of Storytelling
3 credit(s) 3 period(s) lecture
Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning environment in the classroom. Prerequisites: None.

IBS – International Business

IBS101
Introduction to International Business
3 credit(s) 3 period(s) lecture
A basic overview of international business to introduce students to international trade concepts. Focus of the course is on international business environment issues that influence global business practices, decisions and applications. Prerequisites: None.

IFS – Information Studies

IFS101
Information Skills in the Digital Age
3 credit(s) 3 period(s) lecture
Development of skills and competency in accessing, evaluating and using information resources while examining the social and historical context, as well as the technological implications of the use and organization of information. Prerequisite: ENG101, or ENG107, or equivalent.

IGS – Integrated Studies

IGS290
Integrated Studies
3 credit(s) 3 period(s) lecture
Integrated nature of human experience. Critical inquiry of a particular theme from a wide variety of academic viewpoints. Synthesis of knowledge and skills. Evaluation of experience and decisions from ethical, aesthetic, and intellectual perspectives. Preparation of three formal papers. Prerequisites: ENG101 or ENG107 or equivalent.

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INT – Interior Design

INT100
Interior Design Drafting
3 credit(s) 6 period(s) lecture + lab
Basic manual drafting techniques used in the interior design industry. Focus on industry standards of equipment use, lettering, line work, dimensioning, scaling, and annotation. Introduction and practice of industry-specific drawing types, including floor plans, elevations, sections, details, multi-view projection, and paraline. Brief exploration of hand sketching and Computer-Aided Design (CAD) techniques as they relate to manual drafting. **Prerequisites:** None.

INT105
Introduction to Interior Design
3 credit(s) 3 period(s) lecture
Introduction to the profession of interior design, including design process, elements and principles of design, and basic concepts of space planning and furniture layout. Development of design vocabulary relative to architectural details, furnishings, and finishes. **Prerequisites:** None.

INT115
Historical Architecture and Furniture
3 credit(s) 3 period(s) lecture
Historical survey of the development of furniture, interiors, and architecture from antiquity to the 19th Century. **Prerequisites:** None.

INT120
Modern Architecture and Furniture
3 credit(s) 3 period(s) lecture
Survey of the development of furniture, interiors, and architecture from the 19th Century to the present. Emphasis is on modern architects and designers. **Prerequisites:** None.

INT140
Introduction to CAD for Interior Design
3 credit(s) 6 period(s) lecture + lab
Introduction to CAD tools for the interior designer with emphasis on industry-accepted standards for interior design following American Institute of Architects (AIA) guidelines. **Prerequisites:** ARC121 or INT100.

INT145
Drawing and Rendering
3 credit(s) 6 period(s) lecture + lab
Development of basic freehand sketching and perspective drawing skills. Explores styles and techniques with emphasis on quick sketch and presentation type drawings as used by design professionals. **Prerequisites:** ARC121 or INT100.

INT150
Color and Design
3 credit(s) 6 period(s) lecture + lab
Introduction to the theory and application of color as related to the elements and principles of design. Light and its effect on color. Emphasis on the development of presentation skills for the field of interior design. **Prerequisites:** None.

INT160
Fabrics for Interiors
3 credit(s) 3 period(s) lecture
Study of the properties, design, and performance characteristics of interior fabrics. Psychological and cultural impact of textiles on the built environment. Role of the interior designer in working with textiles. Introduction to regulations and codes within the textile industry. **Prerequisites:** None.

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INT170
Interior Materials
3 credit(s) 6 period(s) lecture + lab
Properties, performance, maintenance, sustainability and general characteristic of interior finishes, furnishings, and equipment. Emphasis on building a resource file of interior finishes, furnishings, and equipment sources. Prerequisites: INT105. Prerequisites or Corequisites: INT160.

INT175
Custom Design
3 credit(s) 6 period(s) lecture + lab
Custom design for interiors. Creative problem solving using design theory and process. Visualization of concepts through sketching. Prerequisites: INT105 and (ARC121 or INT100).

INT190
Space Planning
3 credit(s) 6 period(s) lecture + lab
Study of creative, critical, analytical and strategic thinking as it relates to human behavior and the built environment. Emphasis on design theory, process, and application. Stresses creative expression through the utilization of design elements and principles. Prerequisites: INT105 and (ARC121 or INT100). Prerequisites or Corequisites: INT140 or ARC141.

INT215
Professional Practices
3 credit(s) 3 period(s) lecture
Marketing and business processes used in interior design studios. Ethical issues facing interiors industry. Development of business plan. Prerequisites: INT190.

INT240
Kitchen and Bath Design
3 credit(s) 6 period(s) lecture + lab
Exploration into the specific requirements associated with kitchen and bath design. Emphasis on the design process and computer-based tools for interior design. Prerequisites: INT190 and (ARC141 or INT140).

INT241
Kitchen and Bath Building Systems
3 credit(s) 3 period(s) lecture
Study of residential building systems and their impact on kitchen and bath design, including heating/ventilation/air conditioning, plumbing, electrical, lighting, and cabinetry. Emphasis on construction components that relate to the health, safety, and welfare of the client. Prerequisites or Corequisites: INT190.

INT250
Advanced Kitchen and Bath Design
3 credit(s) 6 period(s) lecture + lab
Advanced approaches to kitchen and bath design using National Kitchen and Bath Association (NKBA) planning guidelines. Mastery in the development of a design concept, producing construction documents and 3-D model drawings, verbally and visually presenting the solution, and processing necessary documentation needed to follow a kitchen and bath project from inception to completion. Prerequisites: (INT240 and INT241) or permission of Program Director.

INT268
Lighting Design
3 credit(s) 6 period(s) lecture + lab
Study of interior lighting design and its impact on the health, safety and welfare of the public. Prerequisites: AAS Degree in Interior Design or permission of Department or Division.

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INT271AA
Interior Design Internship
1 credit(s) 5 period(s) lab
Interior design work experience in the interiors industry. Required to work 80 hours. Supervised and evaluated by a coordinator. Prerequisites: Departmental approval. Course Note: May be repeated for a total of four (4) credits with department permission.

INT271AB
Interior Design Internship
2 credit(s) 10 period(s) lab
Interior design work experience in the interiors industry. Required to work 160 hours. Supervised and evaluated by a faculty coordinator. Prerequisites: Departmental approval. Course Note: May be repeated for a total of four (4) credits with department permission.

INT271AC
Interior Design Internship
3 credit(s) 15 period(s) lab
Interior design work experience in the interiors industry. Required to work 240 hours. Supervised and evaluated by a faculty coordinator. Prerequisites: Departmental approval.

INT271BA
Kitchen and Bath Internship
1 credit(s) 5 period(s) lab
Kitchen and bath design work experience in the interiors industry. Required to work 80 hours. Supervised and evaluated by a faculty coordinator. Prerequisites: Permission of Program Director. Course Note: INT271BA may be repeated for a total of four (4) credits with department permission.

INT271BB
Kitchen and Bath Internship
2 credit(s) 10 period(s) lab
Kitchen and bath design work experience in the interiors industry. Required to work 160 hours. Supervised and evaluated by a faculty coordinator. Prerequisites: Permission of Program Director. Course Note: INT271BB may be repeated for a total of four (4) credits with department permission.

INT274AA
Interior Design Study Tour
1 credit(s) 5 period(s) lab
A tour of the interior design industry outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about this multi-faceted career. Prerequisites: Departmental approval.

INT274AB
Interior Design Study Tour
2 credit(s) 10 period(s) lab
A tour of the interior design industry outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about this multi-faceted career. Prerequisites: Departmental approval.

INT274AC
Interior Design Study Tour
3 credit(s) 15 period(s) lab
A tour of the interior design industry outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about this multi-faceted career. Prerequisites: Departmental approval.

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INT285
Design Portfolio Development
1 credit(s) 1.5 period(s) lab
Design, produce, and present a professional portfolio appropriate to the field of Interior Design. Includes material selection and techniques, customer focus, contents and organization, presentation formats, and presentation boards to represent a variety of technical and aesthetic areas of design. Prerequisites: INT240 or permission of Program Director.

IPP – Interpreter Preparation Program

**IPP205**
Introduction to Interpreting
3 credit(s) 3 period(s) lecture
Theories of role, function, responsibilities, and communication strategies of the American Sign Language (ASL)/English interpreter. Covers application and implementation of the National Registry of Interpreters for the Deaf (R.I.D.) and National Association of the Deaf (N.A.D.) Code of Professional Conduct. Additional topics addressed include interpreters functioning as advocates, moral systems vs. ethical systems, standard business practices, and perceptions of consumers. Prerequisites: SLG201 with a grade of “C” or better, or permission of Department or Division. Course Notes: IPP205 may be repeated for a total of nine (9) credit hours.

**IPP208**
Advanced American Sign Language Discourse
4 credit(s) 4 period(s) lecture
Advanced study of terminology and discourse in various fields such as medical, judicial, technological, as well as financial and business transactions. Use of specialized terminology/concepts in dialogues, discussions, and narratives. Advanced use of classifiers, structuring of space, and grammatical features of American Sign Language (ASL). Prerequisites: A grade of "B" or better in SLG203.

**IPP215**
ASL to English Consecutive Interpreting
2 credit(s) 3 period(s) lecture + lab (Fall only)
Sequential development of consecutive interpreting skills from American Sign Language (ASL) to English. Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues, guidance for discovering personal "filters," practice of skills, techniques for self and peer evaluations, and application of theoretical models. Prerequisites: Acceptance into the Interpreter Preparation Program or permission of department/division.

For additional information on **PC program competencies**, visit: http://www.maricopa.edu/academic/ccta/curric/progpc.php

For additional information on **MCCCD course competencies**, visit: http://www.maricopa.edu/academic/ccta/curric/cs.php

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Revised: 9/2/2011; 10/28/11; 12/7/11
IPP216
ASL to English Simultaneous Interpreting
3 credit(s) 4 period(s) lecture + lab
(Spring only)
Sequential development of simultaneous interpreting skills from American Sign Language (ASL) to English. Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues from different genres with increasing length and difficulty, practice of skills, techniques for self and peer evaluations, and application of theoretical models. Prerequisites: A grade of “B” or better in IPP215, or permission of department/division.

IPP218
English to ASL Consecutive Interpreting
2 credit(s) 3 period(s) lecture + lab
(Fall only)
Sequential development of consecutive interpreting skills from English to American Sign Language (ASL). Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues, guidance for discovering personal "filters," practice of skills, techniques for self and peer evaluations, and application of theoretical models. Prerequisites: Acceptance into the Interpreter Preparation Program or permission of department/division. IPP215 suggested but not required.

IPP219
English to ASL Simultaneous Interpreting
3 credit(s) 4 period(s) lecture + lab
(Spring only)
Sequential development of simultaneous interpreting skills from English to American Sign Language (ASL). Source language analysis and target language equivalents emphasized. Analysis of texts and contexts of naturally occurring monologues from differing genres with increasing length and difficulty, practice of skills, techniques for self and peer evaluations, and application of theoretical models. Prerequisites: A grade of “B” or better in IPP218, or permission of department/division.

IPP220
Interactive Interpreting I
4 credit(s) 5 period(s) lecture + lab
(Fall only)
Sequential development of interactive interpreting skills from English to American Sign Language (ASL) and from ASL to English. Perform source language analysis, apply cognitive processing techniques, and produce target language equivalents. Analysis of texts and contexts of naturally occurring dialogues, practice of skills, techniques for self and peer evaluations, and application of theoretical models. Prerequisites or Corequisites: IPP215 and IPP218 or permission of department/division.

IPP221
Interactive Interpreting II
3 credit(s) 4 period(s) lecture + lab
(Spring only)
Continued development of interactive interpreting skills from English to American Sign Language (ASL) and from ASL to English. Perform source language analysis, apply cognitive processing techniques, and produce target language equivalents. Analysis of texts and contexts of naturally occurring dialogues, practice of skills, techniques for self and peer evaluations, and application of theoretical models. Prerequisites: A grade of “B” or better in IPP220, or permission of department/division.

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Revised: 9/2/2011; 10/28/11; 12/7/11
IPP242
Educational Interpreting
3 credit(s) 3 period(s) lecture
Principles, vocabulary, and techniques used specifically in educational interpreting and transliterating. Introduces students to issues in primary, secondary, vocational, and post-secondary settings. Covers sign systems, technical signs, and methods of sign invention. Includes required student observations of educational interpreting outside class. 
Prerequisites: (IPP205 and SLG200) or permission of Department or Division. SLG203 suggested but not required.
Course Notes: IPP242 may be repeated for a total of nine (9) credits.

IPP250AA
Special Topics: Interpreter Preparation
1 credit(s) 1 period(s) lecture + lab
Explores a special topic related to interpreter preparation. Topics vary and include concepts relevant to those pursuing career in (American Sign Language) ASL/English Interpreting and Transliterating. Prerequisites: Acceptance into the Interpreter Preparation Program or permission of Program Director. Course Note: IPP250AA may be repeated for credit.

IPP250AB
Special Topics: Interpreter Preparation
2 credit(s) 2 period(s) lecture + lab
Explores a special topic related to interpreter preparation. Topics vary and include concepts relevant to those pursuing career in (American Sign Language) ASL/English Interpreting and Transliterating. Prerequisites: Acceptance into the Interpreter Preparation Program or permission of Program Director. Course Note: IPP250AB may be repeated for credit.

IPP250AC
Special Topics: Interpreter Preparation
3 credit(s) 3 period(s) lecture + lab
Explores a special topic related to interpreter preparation. Topics vary and include concepts relevant to those pursuing career in (American Sign Language) ASL/English Interpreting and Transliterating. Prerequisites: Acceptance into the Interpreter Preparation Program or permission of Program Director. Course Note: IPP250AC may be repeated for credit.

ITA – Italian

ITA101 ITA1101
Elementary Italian I
4 credit(s) 4 period(s) lecture
Introduction to basic grammar, pronunciation, and vocabulary of Italian. Development of speaking, listening, reading, and writing skills. Study of Italian culture. Prerequisites: None.

ITA102 ITA1102
Elementary Italian II
4 credit(s) 4 period(s) lecture
Continued development of speaking, listening, reading, and writing skills in Italian. Study of Italian culture. Prerequisites: ITA101 or equivalent or departmental approval.

ITA115
Beginning Italian Conversation I
3 credit(s) 3 period(s) lecture
Conversational Italian. Basic sentence structure, pronunciation and vocabulary necessary to develop speaking ability in Italian. Designed for students seeking speaking and listening abilities with little emphasis on grammar. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
ITA116
Beginning Italian Conversation II
3 credit(s) 3 period(s) lecture
Continued development of speaking and listening skills for effective communication in Italian. 
Prerequisites: ITA115 or equivalent or departmental approval.

ITA201  SUM  ITA2201
Intermediate Italian I
4 credit(s) 4 period(s) lecture
Review of essential grammar of the Italian language and study of the Italian Culture. Continued practice and development of reading, writing, and speaking skills. 
Prerequisites: ITA102 or equivalent or departmental approval.

ITA202  SUM  ITA2202
Intermediate Italian II
4 credit(s) 4 period(s) lecture
Continued development of Italian language skills and continued study of the Italian culture. 
Prerequisites: ITA201, or equivalent, or departmental approval.

ITA225
Intermediate Italian Conversation I
3 credit(s) 3 period(s) lecture
Continued development of skills in conversational Italian for effective communication. A review of grammar and development of vocabulary. Intensified study of Italian life and culture. 
Prerequisites: ITA116, or ITA102, or departmental approval.

ITA226
Intermediate Italian Conversation II
3 credit(s) 3 period(s) lecture
Continued development of skills in conversational Italian for effective communication. A review of grammar including the extensive use of grammatical concepts. Continued development of vocabulary. Intensified study of Italian life and culture. 
Prerequisites: ITA225, or ITA201, or departmental approval.

JAS – Justice and Government Agencies Administration

JAS101
Introduction to Justice and Government Agency Administration
3 credit(s) 3 period(s) lecture
The conceptual and contextual elements of bureaucracies in justice and government administration and policy. Decision-making processes in government and the relationships of various constituencies. 
Prerequisites: None.

JAS102
Principles of Management for Justice and Government Agencies I
3 credit(s) 3 period(s) lecture
Introduction to basic principles of modern management in justice and other government agencies. Emphasis on supervisor-employee relationships. 
Prerequisites: None.

JAS110
Basic Principles of Government Fiscal Administration
3 credit(s) 3 period(s) lecture
Basic principles of fiscal administration for state and local government. Includes discussion of budgeting, financial management, revenue fund management, performance measures and reporting, and audits. 
Prerequisites: JAS101 or permission of instructor.

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J AS115
Basic Principles of Human Resources Management for Justice and Government Agencies
3 credit(s) 3 period(s) lecture
Overview of human resources management in government. Includes discussion of planning, staffing, training, compensating, and appraising. Prerequisites: J AS101 or permission of instructor.

J AS150
Organizational Behavior in Justice and Government Agencies
3 credit(s) 3 period(s) lecture
Principles of management in government from an organizational behavior perspective. Discussion of levels of organizational behavior: the individual, the group, and the organizational system. Prerequisites: J AS101 or permission of instructor.

J AS200
Principles of Management for Justice and Government Agencies II
3 credit(s) 3 period(s) lecture
Elaboration of effective practices for managing employees in government. Prerequisites: J AS102 or permission of instructor.

J AS/SWU225
Statistics for Social Research/Justice and Government
3 credit(s) 3 period(s) lecture
Introductory course in descriptive and inferential statistics for social research. Designed to serve as preparation for interpreting and understanding research related to Justice and Government related agencies. Prerequisites: MAT092 or completion of higher level mathematics course.

J AS250
Managing Individuals in Groups for Justice and Government Agencies
3 credit(s) 3 period(s) lecture
Advanced management practices focusing on the manager as a work group leader in justice and government agencies. Prerequisites: J AS102 or permission of instructor.

JPN – Japanese

J PN101
Elementary Japanese I
5 credit(s) 6 period(s) lecture + lab
Basic grammar, pronunciation, and vocabulary of Japanese. Study of Japanese culture. Development of speaking, listening, reading and writing skills. Prerequisites: None.

J PN102
Elementary Japanese II
5 credit(s) 6 period(s) lecture + lab
Continued study of basic grammar, pronunciation and vocabulary of Japanese. Study of the Japanese culture. Intensive practice in oral communication and development of reading and writing skills. Prerequisites: J PN101 or departmental approval.

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J PN115
Beginning Japanese Conversation I
3 credit(s) 3 period(s) lecture
Conversational Japanese. Basic sentence structure pronunciation, and vocabulary necessary to develop speaking ability in Japanese. Designed for students seeking speaking and listening abilities, with little emphasis on grammar, reading, or writing. Prerequisites: None.

J PN116
Beginning Japanese Conversation II
3 credit(s) 3 period(s) lecture
Continuation of conversational Japanese for survival in everyday business and social situations. Expansion of vocabulary and sentence structure through aural/oral practice. Practice in reading and writing Kana. Prerequisites: J PN115.

LAS – Paralegal Studies

LAS100
The Paralegal Profession
3 credit(s) 3 period(s) lecture
Focus on the role, responsibilities, and ethical standards of a paralegal. Provides an overview of the legal system and the role of the paralegal in the legal system. Emphasis on professional development and job-search strategies. Prerequisites: None.

LAS101
Introduction to Law
3 credit(s) 3 period(s) lecture
Legal terminology and basic legal principles in the areas of tort, contract, and criminal law. Interrelationships among lawyers, the court system, and law enforcement and administrative agencies. Development of a case for trial, adjudication, and post-verdict procedures in the civil and criminal systems. Prerequisites: None.

LAS109
Civil Procedures I
3 credit(s) 3 period(s) lecture
Prettrial procedural issues in both Arizona and the federal system. Emphasis on Arizona Rules of Civil Procedure 1-37, 41, 55, 56, and 72-76. Coverage of applicable time limits, filing requirements, and proficiency in locating appropriate provisions in the Arizona Rules of Civil Procedure. Drafting of pleadings and motions and the application of procedural rules pertinent to the early stages of civil litigation. Prerequisites: Acceptance into the Paralegal Studies program. Prerequisites or Corequisites: LAS101 and (BPC110 or permission of Department Chair or Program Director.)

LAS110
Civil Procedures II
3 credit(s) 3 period(s) lecture
Application of the procedural aspects of discovery, trial preparation, and post-trial work as part of a litigation team. Emphasis on practical concerns, such as interviewing of witnesses; preparation of discovery documents, exhibits, and transmittal memoranda; summarizing and indexing depositions; organization of files; preparation of trial notebooks; and participation in a mock trial. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

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LAS115
Criminal Trial Procedure
3 credit(s) 3 period(s) lecture
Procedural aspects of the criminal trial process in Arizona state courts from preliminary proceedings through trial. Emphasis on application of the rules of criminal procedure and preparation of common trial documents by paralegals. Documents include the charging instrument, pre-trial motions, and jury instructions. Prerequisites or Corequisites: LAS101 or permission of department chair, or program director.

LAS131
Legal Writing
3 credit(s) 3 period(s) lecture
The use of proper grammar, punctuation, and spelling in the construction of sentences and the development of paragraphs. Use of case briefs to study effective writing and analytical techniques. Analysis and application of the writing process to produce well-written documents commonly used in the practice of law. Prerequisites or Corequisites: LAS109 and (BPC110 or permission of department chair or program director).

LAS203
Ethics and Professional Practice
3 credit(s) 3 period(s) lecture
Rules of professional responsibility and ethical requirements with an emphasis on their application to legal assistants. Sources of power to regulate the practice of law. Issues related to unauthorized practice of law. Examination of professionalism in the legal profession. Prerequisites: LAS131 and (BPC110 or permission of Department Chair or Program Director).

LAS204
Contract Law
3 credit(s) 3 period(s) lecture
Examination of contracts and their regulation by the Uniform Commercial Code. Review and drafting of basic agreements. Prerequisites or Corequisites: LAS109 and (BPC110 or permission of Department Chair or Program Director).

LAS208
Probate
3 credit(s) 3 period(s) lecture
Emphasis on various ways in which property can be held and passed on. Requirements for valid wills and trusts. Steps involved in estate administration and appropriate forms to be used. Includes drafting basic wills and simple trusts. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

LAS211
Legal Research
3 credit(s) 3 period(s) lecture
Use of print and electronic media to locate public documents, statutes, administrative regulations, and cases from county, state, and federal jurisdictions. Reading and interpreting research results. Shepardizing. Use of proper citation forms. Prerequisites: ENG101 Prerequisites or Corequisites: LAS109 and (BPC110 or permission of department chair or program director).

LAS212
Tort Law
3 credit(s) 3 period(s) lecture
Basic elements of negligence, strict liability, intentional torts; defenses; damages; insurance coverage. Evaluation of records and personal injury claims; review of insurance policies; settlement brochure; preparation of case intake memorandum. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

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LAS213
Employment Law
3 credit(s) 3 period(s) lecture
Practical application of employment law principles. Examination of the employment relationship and ways in which it is created. Determination of applicable employee benefits. Development of appropriate employee job performance methods. Assessment of discrimination claims. Evaluation of privacy rights in the workplace. Prerequisites: (BPC110 and LAS109) or permission of Department Chair or Program Director.

LAS214
Business Organizations
3 credit(s) 3 period(s) lecture
Analysis and evaluation of business organizations with practical application of the law to analyze the utility, form, and function of Sole Proprietorships, General Partnerships, Limited Partnerships, Limited Liability Companies, and Corporations. Preparation of documents to create the most effective and feasible business organization under a given set of circumstances. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

LAS216
Real Estate Transactions
3 credit(s) 3 period(s) lecture
Investigation into various aspects of real estate sales, purchases and encumbrances. Includes preparation of deed of trust and an agreement for sale of property. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

LAS217
Family Law
3 credit(s) 3 period(s) lecture
Legal analysis of marriage, dissolution of marriage, parental rights and duties; pleading and practice. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

LAS218
Administrative Law
3 credit(s) 3 period(s) lecture
Introduction to fundamental administrative law concepts including the delegation of powers, due process, citizen access and participation, rulemaking, adjudication, and judicial review. Emphasis on Arizona administrative procedures and the role of the paralegal in informal and prehearing advocacy and proceedings before a hearing officer. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

LAS220
Paralegal Internship Seminar
1 credit(s) 1 period(s) lecture
Coordinates on-the-job experiences with interpersonal relations, communications, time-management, and case-management skills. Provides opportunity to discuss problems encountered during internship. Prerequisites: LAS203 and LAS211 and (LAS204 or LAS212), and (BPC110 or permission of department chair or program director). Corequisites: LAS221AA or LAS221AB or LAS221AC. Course Note: May be repeated for a total of two (2) credit hours.

LAS221AA
Paralegal Internship
1 credit(s) 5 period(s) lab
Laboratory portion of LAS220, Paralegal Internship Seminar; 80 hours of work. Supervision and evaluation by on-the-job supervisor as well as college coordinator. Prerequisites: Permission of department chairperson or program director. Course Note: May be repeated for a total of three (3) credit hours.
LAS221AB
Paralegal Internship
2 credit(s) 10 period(s) lab
Laboratory portion of LAS220, Paralegal Internship Seminar; 160 hours of work. Supervision and evaluation by on-the-job supervisor as well as college coordinator. Prerequisites: Permission of department chairperson or program director. Course Note: May be repeated for a total of four (4) credit hours.

LAS221AC
Paralegal Internship
3 credit(s) 15 period(s) lab
Laboratory portion of LAS220, Paralegal Internship Seminar; 240 hours of work. Supervision and evaluation by on-the-job supervisor as well as college coordinator. Prerequisites: Permission of department chairperson or program director. Course Note: May be repeated for a total of six (6) credit hours.

LAS225
Legal Research, Analysis, and Writing
3 credit(s) 3 period(s) lecture
Integration and further development of legal research and writing skills with an emphasis on critical thinking, issue analysis, and motion practice. Focus on integrating research, writing, and legal argument development. Prerequisites: LAS131 and LAS211 and (BPC110 or permission of department chair or program director).

LAS229
Litigation Technologies
3 credit(s) 3 period(s) lecture
Use of presentation software; use of timekeeping, calendaring, and docketing software; use of litigation support software to organize case files; use of electronic trial presentation software in an electronic courtroom; ethical issues. Prerequisites: LAS110 and (BPC110 or equivalent or permission of Department Chair or Program Director).

LAS237
Legal Interviewing, Investigation, and Report Writing
3 credit(s) 3 period(s) lecture
Foundations for interviewing and investigation. Questioning of clients and experts. Documenting and summarizing interviews. Factual investigation sources and techniques. Evidence analysis and preservation. Documenting results of factual investigations. Prerequisites: LAS131 and LAS211 and (BPC110 or permission of department chair or program director).

LAS261
Bankruptcy
3 credit(s) 3 period(s) lecture
Examination of bankruptcy laws and procedures and the role of paralegals in bankruptcy practice, including the commencement of a case, preparation of common forms, review of bankruptcy litigation including contested matters and adversary proceedings, and debtors' and creditors' rights and obligations. Prerequisites: LAS109 and (BPC110 or permission of department chair or program director).

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Revised: 9/2/2011; 10/28/11; 12/7/11
LBA – Laboratory Assisting

LBA150
Overview of Laboratory Assisting
1 credit(s) 1 period(s) lecture
Overview of laboratory services, laboratory professionals, and the role of a laboratory assistant. Understanding of certification, accreditation, and regulatory agencies. Emphasis on process improvement, laboratory mathematics, documentation, medico-legal implications, and specimen integrity. Application of pre-analytical and basic testing principles, infection control, and laboratory safety. Recognition of acceptable quality control and quality management principles. Includes information systems and information management in laboratories. Importance of professional growth and ethical conduct. **Prerequisites:** (HCC130 and HCC145AA and HCE109 and HCE110 and HCE111), or permission of program director.

LBA152
Laboratory Assisting: Principles and Procedures
2 credit(s) 6 period(s) lecture + lab
Principles and procedures for pre-analytical processing of laboratory specimens. Performance of specimen processing, pre-analytical processes, and point-of-care testing. Application of quality assurance, quality control, infection control, and laboratory safety. Use of laboratory supplies, instrumentation, and information systems. Performing clerical and computer functions using medico-legal guidelines for documentation. **Prerequisites or Corequisite:** LBA150.

LBA158
Laboratory Assisting Practicum
2 credit(s) 6 period(s) lab
Practicum in laboratory assisting based in healthcare facilities or reference laboratories. Performance of clinical skills for pre-analytical processing of laboratory specimens, initial testing phases, and point-of-care testing using laboratory instrumentation, information systems, and supplies. Application of quality assurance, quality control, infection control, and laboratory safety. Performance of clerical and computer functions using medico-legal guidelines for documentation. Use of professional and ethical conduct in all interpersonal communications. **Prerequisites:** LBA150 and LBA152 and permission of program director.

LBS – Library Skills

LBS101
Library Resource Concepts and Skills
2 credit(s) 2 period(s) lecture
Information access skills for print and electronic resources. Use of libraries and their structure, tools, and staff to identify, locate, evaluate, and make effective and ethical use of information. Emphasizes critical thinking skills. **Prerequisites:** None.

LBS201
Electronic Resources Concepts and Skills
1 credit(s) 1 period(s) lecture
Use of computers to access electronic databases and to process search results. Includes search concepts and strategies, evaluating search results, and bibliographic citing of electronic sources. **Prerequisites:** None.

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MAT – Mathematics

The following courses require a graphing calculator: MAT091, MAT120, MAT121, MAT142, MAT151, MAT156, MAT157, MAT182, MAT187, MAT206, MAT213, MAT218, MAT220, MAT225, MAT230, MAT240, and MAT261.

MAT081
Basic Arithmetic
4 credit(s) 4 period(s) lecture
Primary emphasis placed on fundamental operations with whole numbers, fractions, decimals, integers, and rational numbers; proportions, and percentages. Other topics include representations of data, geometric figures, and measurement. Prerequisites: None. Course Note: Students may receive credit for only one of the following: MAT081, MAT082, or MAT083.

MAT082
Basic Arithmetic
3 credit(s) 3 period(s) lecture
Primary emphasis placed on fundamental operations with whole numbers, fractions, decimals, integers, and rational numbers; proportions, and percentages. Other topics include representations of data, geometric figures, and measurement. Prerequisites: None. Course Note: Students may receive credit for only one of the following: MAT081, MAT082, or MAT083.

MAT090
Developmental Algebra
5 credit(s) 5 period(s) lecture
Linear behavior; linear equations and inequalities in one and two variables; graphs; systems of equations in two variables; function notation, graphs, and data tables; operations on polynomials; properties of exponents; applications. Prerequisites: Grade of "C" or better in MAT082, or MAT102, or equivalent, or satisfactory score on District Placement exam. Course Note: Students may receive credit for only one of the following: MAT090, MAT091, MAT092, or MAT093.

MAT091
Introductory Algebra
4 credit(s) 4 period(s) lecture
Linear behavior; linear equations and inequalities in one and two variables; graphs; systems of equations in two variables; function notation, graphs, and data tables; operations on polynomials; properties of exponents; applications. Prerequisites: Grade of "C" or better in MAT082, or MAT102, or equivalent or satisfactory score on District placement exam. Course Note: May receive credit for only one of the following: MAT090, MAT091, MAT092, or MAT093.

MAT102
Mathematical Concepts/Applications
3 credit(s) 3 period(s) lecture
A problem solving approach to mathematics as it applies to life and the world of work. Development, demonstration, and communication of mathematical concepts and formulas that relate to measurement, percentage, statistics, and geometry. Prerequisites: Grade of "C" or better in MAT082, or equivalent, or satisfactory score on District placement exam.

MAT108
Tutored Mathematics
2 credit(s) 2 period(s) lecture
Structured tutorial assistance and math study skills to help students achieve success in a mathematics course in which they are concurrently enrolled. Mathematics study skills emphasized. Prerequisites: None. Corequisites: MAT082, or MAT090, or MAT091, or MAT092, or MAT120, or MAT121, or MAT122, or MAT140, or MAT 141, or MAT 142, or MAT150, or MAT151, or MAT152, or permission of department chair. Course Note: MAT108 may be repeated for a total of ten (10) credits.

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MAT120
Intermediate Algebra
5 credit(s) 5 period(s) lecture
Quadratic, rational, radical, exponential, and logarithmic functions and equations; graphs of quadratic, exponential, and logarithmic functions; equations quadratic in form; operations on rational expressions, radical expressions, and complex numbers; rational exponents; applications. **Prerequisites:** Grade of "C" or better in MAT090, MAT091, MAT092, MAT093, or equivalent, or a satisfactory score on the District placement exam. **Course Note:** May receive credit for only one of the following: MAT120, MAT121, or MAT122.

MAT121
Intermediate Algebra
4 credit(s) 4 period(s) lecture
Quadratic, rational, radical, exponential, and logarithmic functions and equations; graphs of quadratic, exponential, and logarithmic functions; equations quadratic in form; operations on rational expressions, radical expressions, and complex numbers; rational exponents; applications. **Prerequisites:** Grade of "C" or better in MAT090, MAT091, MAT092, MAT093, or equivalent, or a satisfactory score on the District placement exam. **Course Note:** May receive credit for only one of the following: MAT120, MAT121, or MAT122.

MAT142
College Mathematics
3 credit(s) 3 period(s) lecture
Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include set theory, probability, statistics, finance, and geometry. **Prerequisites:** Grade of "C" or better in MAT120 or MAT121 or MAT122 or equivalent, or satisfactory score on District placement exam.

MAT151
MAT1151
College Algebra/Functions
4 credit(s) 4 period(s) lecture
Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions; systems of equations, modeling and solving real world problems. Additional topics may include matrices, combinatorics, sequences and series, and conics. **Prerequisites:** Grades of "C" or better in MAT120, MAT121, MAT122, equivalent, or satisfactory score on District placement exam. **Course Note:** May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187.

MAT156
Mathematics for Elementary Teachers I
3 credit(s) 3 period(s) lecture
Focuses on numbers and operations. Algebraic reasoning and problem solving integrated throughout the course. **Prerequisites:** Grade of "C" or better in MAT142 or MAT150 or MAT151 or MAT152 or equivalent, or satisfactory score on District placement exam.

MAT157
Mathematics for Elementary Teachers II
3 credit(s) 3 period(s) lecture
Focuses on measurement, geometry, probability and data analysis. Appropriate technologies, problem solving, reasoning, and proof are integrated throughout the course. **Prerequisite:** MAT156 or equivalent.

MAT182
Plane Trigonometry
3 credit(s) 3 period(s) lecture
A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, inverse trigonometric functions, solutions of trigonometric equations, complex numbers and properties of triangle solution. May receive credit for only one of the following: MAT182 or MAT187. **Prerequisites:** Grade of "C" or better in MAT150, or MAT151, or MAT152, or equivalent, or concurrent registration in MAT150, or MAT151, or MAT152, or satisfactory score on District placement exam.

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MAT187
Precalculus
5 credit(s) 5 period(s) lecture
A precalculus course combining topics from college algebra and trigonometry. Preparation for analytic geometry and calculus. May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187. Prerequisites: Grade of "B" or better in MAT120, MAT121, or MAT122, or equivalent, or satisfactory score on a placement test. Course Note: Strongly recommended that students have some knowledge of trigonometry.

MAT206
Elements of Statistics
3 credit(s) 3 period(s) lecture
Basic concepts and applications of statistics, including data description, estimation and hypothesis tests. Prerequisites: (A grade of "C" or better in MAT140 or MAT141 or MAT142) or (A grade of "C" or better in MAT150 or MAT151 or MAT152) or equivalent, or satisfactory score on District placement exam.

MAT213
Brief Calculus
4 credit(s) 4 period(s) lecture
Introduction to the theory, techniques and applications of the differential and integral calculus of functions with problems related to business, life, and the social sciences. Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or MAT187, or appropriate Math placement test score. Course Note: Students may receive credit for only one of the following: MAT212 or MAT213.

MAT218
Mathematical Analysis for Business
4 credit(s) 4 period(s) lecture
An introduction to the mathematics required for the study of business. Includes multivariable optimization, Lagrange multipliers, linear programming, linear algebra, probability, random variables, discrete and continuous distributions. Prerequisites: Grade of C or better in MAT212 or MAT213.

MAT220
Calculation with Analytic Geometry I
5 credit(s) 5 period(s) lecture
Limits, continuity, differential and integral calculus of functions of one variable. Prerequisites: Grade of "C" or better in [MAT182 and (MAT150, MAT151 or MAT152)], or MAT187, or appropriate Math placement test score. Course Note: Students may receive credit for only one of the following: MAT220 or MAT221.

MAT225
Elementary Linear Algebra
3 credit(s) 3 period(s) lecture
Introduction to matrices, systems of linear equations, determinants, vector spaces, linear transformations and eigenvalues. Emphasizes the development of computational skills. Prerequisites: Grade of "C" or better in MAT212 or MAT220, or MAT221, or equivalent.

MAT230
Calculation with Analytic Geometry II
5 credit(s) 5 period(s) lecture
Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the analysis of sequences and series. Prerequisites: Grade of "C" or better in MAT220 or MAT221 or equivalent. Course Note: Student may receive credit for only one of the following: MAT230 or MAT231.
MAT240
Calculus with Analytic Geometry III
5 credit(s) 5 period(s) lecture
Multivariate calculus including vectors, vector-valued functions, partial differentiation, multiple integration, and an introduction to vector fields. **Prerequisites:** Grade of "C" or better in MAT230 or MAT231. **Course Note:** Student may receive credit for only one of the following: MAT240 or MAT241.

MAT276
Modern Differential Equations
4 credit(s) 4 period(s) lecture
Introduces differential equations, theoretical and practical solution techniques with applications. Problem solving using MATLAB. **Prerequisites:** Grade of "C" or better in MAT230, or MAT231, or permission of Department or Division. **Course Notes:** Students may receive credit for only one of the following: MAT276 or MAT277.

MDL – Medical Laboratory Science

MDL190
Clinical Laboratory Operations
2 credit(s) 2 period(s) lecture
Overview of laboratory services, laboratory professionals, and the role of a medical laboratory technician (clinical laboratory technician). Understanding of health care reform, reimbursement, cost analysis, coding, credentialing, accreditation, and regulatory agencies. Emphasis on process improvement, laboratory mathematics, statistics, documentation, medico-legal implications, education, management and personnel, and specimen integrity. Application of pre-analytical, analytical, and post-analytical principles, infection control, and laboratory safety. Recognition of acceptable quality control and quality management principles, phlebotomy principles, and lab equipment, glassware, labware, and water purification. Includes information systems and information management in laboratories. Importance of professional growth, communicating with the patient and public, and ethical conduct. **Prerequisites:** Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL240
Clinical Urinalysis and Body Fluid Analysis
3 credit(s) 5 period(s) lecture + lab
Examines anatomy and physiology of the renal system, renal diseases, and renal function tests. Emphasis on interpretation, evaluation, and reporting of urinalysis and body fluid results, urine and body fluid collection techniques, types, specimen handling and preservation, and instrument calibration, maintenance, and quality control. Application of body fluid analyses, and chemical and microscopic analysis of urine. **Prerequisites:** Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL241
Practicum: Clinical Urinalysis and Body Fluid Analysis
1 credit(s) 6 period(s) lab
Practicum experience in clinical urinalysis and body fluid analysis based in healthcare facilities or reference laboratories. Assessment of anatomy and physiology of the renal system, renal diseases, and renal function tests. Performance of interpretation, evaluation, and reporting of urinalysis and body fluid results, urine and body fluid collection techniques, types, specimen handling and preservation, and instrument calibration, maintenance, and quality control. Performance of body fluid analyses and chemical and microscopic analysis of urine. **Prerequisites:** Acceptance into the Medical Laboratory Science program or permission of Program Director.

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MDL242
Clinical Hematology and Hemostasis
6 credit(s) 9 period(s) lecture + lab
Examines the anatomy and physiology of the hematopoietic and hemostasis systems, hematology and hemostasis case studies, anemia categories, and thrombocyte, hemostatic, and malignant and nonmalignant leukocyte disorders. Emphasis on interpreting, evaluating, and reporting hematology and hemostasis results, anticoagulant therapy, morphology, peripheral smear correlation with analyzer results and patient condition, erythrocyte indices, collection techniques, specimen handling, calibration, and quality control. Methods of analysis on hematology and hemostasis analyzers, and preventive maintenance. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL243
Practicum: Clinical Hematology and Hemostasis
1 credit(s) 6 period(s) lab
Practicum experience in clinical hematology and hemostasis based in healthcare facilities or reference laboratories. Assessment of the anatomy and physiology of the hematopoietic and hemostasis systems, hematology case studies, anemia categories, and thrombocyte, malignant and nonmalignant leukocyte disorders. Application of interpreting, evaluating, and reporting hematology results, morphology, peripheral smear correlation with analyzer results, erythrocyte indices, collection techniques, specimen handling, calibration, and quality control. Emphasis on hematology and hemostasis analyzers, and preventive maintenance. Perform hematology and hemostasis analyses. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL244
Clinical Immunohematology and Immunology
6 credit(s) 9 period(s) lecture + lab
Principles of immunity and immunologic testing. Causes of disorders of the immune system. Study of blood group antigens, antibodies, and genetics. Understanding of donor blood collection, component preparation, and transfusion therapies. Performance of testing techniques and evaluation of data. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL245
Practicum: Clinical Immunohematology and Immunology
1 credit(s) 6 period(s) lab
Practicum in immunohematology and immunology in healthcare facilities or reference laboratories. Performance of clinical skills in immunity and immunologic testing, testing for disorders of the immune system, blood group antigens, antibodies, and genetics. Observation of donor blood collection, component preparation, and transfusion therapies. Performance of testing techniques and evaluation of data. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL246
Clinical Microbiology
6 credit(s) 9 period(s) lecture + lab
Emphasis on microbial infectious and bioterrorism agents, classification, morphology, phenotyping, diseases, biotechnology and molecular technology, quality assurance and quality control, epidemiological significance, and regulatory standards. Application of antimicrobial, biochemical, and differential testing, drug resistance, selection, inoculation and incubation of culture media, isolation techniques, cell culture and viral detection tests, and macroscopic and microscopic evaluation. Emphasis on staining, rapid and commercial testing methods, safety precautions, specimen collection, handling, storage, and disposal of biological material, pretreatment, decontamination, and concentration techniques, specimen type, source, and common microbial flora, specimen acceptability, and instrumentation. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of Program Director.

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Revised: 9/2/2011; 10/28/11; 12/7/11
MDL247
Practicum: Clinical Microbiology
1 credit(s) 9 period(s) lab
Practicum experience in clinical microbiology based in healthcare facilities or reference laboratories. Emphasis on microbial infectious and bioterrorism agents, classification, morphology, phenotyping, diseases, biotechnology and molecular technology, quality assurance and quality control, epidemiological significance, and regulatory standards. Application of antimicrobial, biochemical, and differential testing, drug resistance, selection, inoculation and incubation of culture media, isolation techniques, cell culture and viral detection tests, and macroscopic and microscopic evaluation. Procedures for staining, rapid and commercial testing methods, safety precautions, specimen collection, handling, storage, and disposal of biological material, pretreatment, decontamination, and concentration techniques, specimen type, source, and common microbial flora, specimen acceptability, and instrumentation. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of the Program Director.

MDL248
Clinical Chemistry
6 credit(s) 9 period(s) lecture + lab
Principles and procedures of clinical chemistry and testing for diseases of protein, nonprotein nitrogen compounds, lipid, glucose, bilirubin, liver disease, cardiac and endocrine function, toxicology, therapeutic drug monitoring, acid base balance, electrolytes, and trace elements. Emphasis on quality assurance, quality control, mathematics and statistical analysis, specimen collection, and preanalytical processes. Study of immunoassays, nucleic acid probes, viral and tumor markers, automation of analytical techniques, spectrophotometry, genetic diseases and inborn errors of metabolism, and point-of-care testing. Use of reagents, equipment, supplies, and units of measure. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL249
Practicum: Clinical Chemistry
1 credit(s) 9 period(s) lab
Practicum in clinical chemistry based in healthcare facilities or reference laboratories. Performance of clinical skills in clinical chemistry and testing for diseases of protein, nonprotein nitrogen compounds, lipid, glucose, bilirubin, liver disease, cardiac and endocrine function, toxicology, therapeutic drug monitoring, acid base balance, electrolytes, genetic diseases and inborn errors of metabolism, and trace elements. Application of quality assurance, quality control, mathematics and statistical analysis, specimen collection, and preanalytical processes. Performance of immunoassays, nucleic acid probes, viral and tumor markers, automation of analytical techniques, spectrophotometry, and point-of-care testing. Use of reagents, equipment, supplies, and units of measure. Prerequisites: Acceptance into the Medical Laboratory Science program or permission of Program Director.

MDL290
Medical Laboratory Science
Program Review
2 credit(s) 2 period(s) lecture
Preparation for the professional practice national examinations. Topics include methodologies, techniques, and problem solving relative to urinalysis; body fluids, hematology, hemostasis, immunohematology, immunology, microbiology, and chemistry. Development of a professional practice resume, personalized test taking strategies and examination study plan. Maintenance of professional competency and lifelong learning and enhancing professional practice. Prerequisites: (MDL247 and MDL249), or (current employment with a minimum of three years experience as a Medical Laboratory Technician), or permission of Program Director.

MDL295AA
Special Topics: Medical Laboratory Science
1 credit(s) 2 period(s) lecture + lab
Explores a special topic related to medical laboratory science. Topics vary and include concepts relevant to those advancing or pursuing careers in medical laboratory science. Prerequisites: Permission of Program Director. Course Note: May be repeated for a total of three (3) credit hours.

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MDL295AB
Special Topics: Medical Laboratory Science
2 credit(s) 3 period(s) lecture + lab
Explores a special topic related to medical laboratory science. Topics vary and include concepts relevant to those advancing or pursuing careers in medical laboratory science. **Prerequisites:** Permission of Program Director. **Course Note:** May be repeated for a total of six (6) credit hours.

MDL295AC
Special Topics: Medical Laboratory Science
3 credit(s) 4 period(s) lecture + lab
Explores a special topic related to medical laboratory science. Topics vary and include concepts relevant to those advancing or pursuing careers in medical laboratory science. **Prerequisites:** Permission of Program Director. **Course Note:** May be repeated for a total of six (6) credit hours.

MGT – Management

MGT119
Introduction to Credit Unions
3 credit(s) 3 period(s) lecture
Introduction to credit unions, their structures, legal authority for existence, regulation and insurance, and role in business/society. **Prerequisites:** None.

MGT120
Credit Union Operations
3 credit(s) 3 period(s) lecture
Overview of credit union operations including member services, credit granting, collections, marketing, financial counseling laws, and regulations as they apply to credit union operations. **Prerequisites:** MGT119 or departmental approval.

MGT/BTO148
Office Ethics and Culture
2 credit(s) 2 period(s) lecture
Ethical issues and standards in the office; making ethical choices. Relationships and attitudes in the office. Office politics **Prerequisites:** None.

MGT175
Business Organization and Management
3 credit(s) 3 period(s) lecture
Covers basic principles of managing quality and performance in organizations. Covers management functions: planning, organizing, leading, and controlling. Emphasizes continual improvement, ethics, and social responsibility. **Prerequisites:** None.

MGT229
Management and Leadership I
3 credit(s) 3 period(s) lecture
Covers management concepts and applications for business, industry, and government organizations. **Prerequisites:** None.

MGT230
Management and Leadership II
3 credit(s) 3 period(s) lecture
Includes practical applications of activities, issues and problems related to current managerial and supervisory skills and talents. **Prerequisites:** MGT229 or departmental approval.

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MGT250
Credit Union Financial Management
3 credit(s) 3 period(s) lecture
Introduction and examination of credit union accounting and financial management. Includes basic accounting principles, accounting cycles, subsidiary and control general ledgers, financial statements, accruing and calculating member dividends, reserve accounts, internal controls, financial statement analysis, preparing and managing financial budgets, cash flow budgeting, interest earning assets (loans and investments, cost of funds, risk management, financial trends, and audits). Prerequisites: MGT119.

MGT251
Human Relations in Business
3 credit(s) 3 period(s) lecture
Analysis of motivation, leadership, communications, and other human factors. Cultural differences that may create conflict and affect morale within organizations. Prerequisites: None. MGT101, or MGT175, or MGT229 suggested but not required.

MGT253
Owning and Operating a Small Business
3 credit(s) 3 period(s) lecture
Starting, organizing, and operating a small business, including location, finance management processes, advertisement and promotion, credit, inventory control and ethics. Prerequisites: None.

MGT259
Management Seminar
1 credit(s) 1 period(s) lecture
Classroom portion of the management internship experience, including student development of specific job-related objectives to be accomplished at the work site. Exploration of general business and specific work-related topics in a seminar setting. May be repeated for a total of two (2) credits. Prerequisites: Departmental approval. Corequisites: MGT260AA.

MGT260AA
Management Internship
3 credit(s) 15 period(s) lab
Laboratory portion of management seminar course. Fifteen hours weekly. Supervised and evaluated by internship coordinator. May be repeated for a total of six (6) credits. Prerequisites: Departmental approval. Corequisites: MGT259.

MGT276
Personnel/Human Resources Management
3 credit(s) 3 period(s) lecture
Human resource planning, staffing, training, compensating, and appraising employees in labor-management relationships. Prerequisites: None. MGT101, or MGT175, or MGT229 suggested but not required.

MGT277
Labor Relations
3 credit(s) 3 period(s) lecture
Covers the historical, legal, and environmental parameters surrounding current labor/management relations, including contract negotiations and grievance procedures. Prerequisites: None. MGT101, MGT175, or MGT229 suggested but not required.

MGT286
Human Resource Employment Management
3 credit(s) 3 period(s) lecture
Techniques and methodology for coordinating and monitoring effective employment selection practices. Includes description of employment functions, staffing analysis, employment recruitment and advertising, applicant screening, interviewing and reference checking, employee selection and placement within a human resources division. Prerequisites: MGT276 or permission of department.

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MHL – Music: History/Literature

MHL140
Survey of Music History
3 credit(s) 3 period(s) lecture
Study of composers, compositions, styles, and periods in music history. Prerequisites: None.

MHL143
Music in World Cultures
3 credit(s) 3 period(s) lecture
Non-European musical traditions including the study of music in rituals, musical instruments and the impact of cultures on musical styles. Prerequisites: None.

MHL145
American Jazz and Popular Music
3 credit(s) 3 period(s) lecture
The study of cultural and social contributions to the evolution of American jazz and popular music from the mid-1800's to present. Prerequisites: None.

MHL146
Survey of Broadway Musicals
3 credit(s) 3 period(s) lecture
Survey of Broadway musicals traced from their origins to the present viewed in their cultural, political, and socioeconomic contexts. Emphasis on stylistic periods, composers, lyricists, directors, and choreographers. Prerequisites: None.

MHL153
Rock Music and Culture
3 credit(s) 3 period(s) lecture
History of Rock music and how cultural, social, political, and economic conditions have shaped its evolution. Prerequisites: None.

MHL241
Music History and Literature to 1750
3 credit(s) 3 period(s) lecture
In-depth study of music history from the primitive era through the Baroque period. Prerequisites or Corequisites: MTC155 and MTC156, or permission of Instructor.

MHL242
Music History and Literature 1750 to Present
3 credit(s) 3 period(s) lecture
In-depth study of music history from the Classical period through the Contemporary period. Prerequisites: MHL241 or permission of instructor.

MIS – Military Science

MIS101
Introduction to the Military I
3 credit(s) 5 period(s) lecture & lab
(Fall only)
Overview of mission, organization and structure of the Army and its role in national defense, discussion of current military issues. Prerequisites: None.

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MIS102
Introduction to the Military II
3 credit(s) 5 period(s) lecture & lab
(Spring only)
Introduces problem-solving methods, critical thinking, decision-making, and group cohesion as applied in a military environment. **Prerequisites:** None.

MIS201
Introduction to Leadership Dynamics I
3 credit(s) 5 period(s) lecture & lab
(Fall only)
Introduces interpersonal dynamics involved in military team operations, theory and application of military leadership principles. **Prerequisites:** None.

MIS202
Introduction to Leadership Dynamics II
3 credit(s) 5 period(s) lecture & lab
(Spring only)
Introduction to interpersonal dynamics involved in military team operations; theory and application of military leadership principles. **Prerequisites:** None.

**MKT – Marketing**

MKT/TEC109
Introduction to Fashion Merchandising
3 credit(s) 3 period(s) lecture
Explores the various levels and specialized segment of the fashion industry, the principles of fashion, the fundamentals of merchandising apparel, consumers’ influence on demand and marketing activities. **Prerequisites:** None.

MKT/TEC151
Display and Visual Merchandising
3 credit(s) 4 period(s) lecture + lab
An examination of the principles of design including line, color, balance, and texture as they relate to the display of merchandise. Participation in displays, field trips, and individual projects. **Prerequisites:** None.

MKT/TEC200
Retail Buying
3 credit(s) 3 period(s) lecture
Examines management/buyer role in investment, pricing, planning, controlling sales and inventories. **Prerequisites:** None. Any BPC/CIS spreadsheet course recommended.

MKT263
Advertising Principles
3 credit(s) 3 period(s) lecture
Introduces the advertising function within business, including media study, creative strategies, and advertising campaigns. **Prerequisites:** None. MKT271 suggested, but not required.

MKT267
Principles of Salesmanship
3 credit(s) 3 period(s) lecture
Analyzes and applies the steps and techniques used in personal selling. Highlights the role of the professional sales representative and his/her functions as they relate to the company's mission and customer expectations. **Prerequisites:** None.

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MKT271
Principles of Marketing
3 credit(s) 3 period(s) lecture
An analysis of the marketing process and environment with regard to the product, pricing, distribution, and communication in order to satisfy buyer needs. Prerequisites: None.

MKT/TEC274AC
Fashion Merchandising Study Tour
3 credit(s) 15 period(s) lab
A tour of the retail merchandising industry outside the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance awareness of this multifaceted career. Prerequisites: Department approval.

MMT – Multimedia Technology

MMT/CIS140
Survey of Multimedia Technology
2 credit(s) 3 period(s) lecture + lab
Introduction to multimedia technology and its uses. Overview of the various hardware and software used in developing and delivering multimedia. Emphasis on how multimedia is used in education and training. Provides a basic understanding of the process used to define and develop multimedia applications. Prerequisites: CIS105, or permission of instructor.

MMT/ADA/ART184
Computer Animation
3 credit(s) 6 period(s) lecture + lab
The art of animation (animated sequences, special effects, titles, etc.) using the computer. Construction characters, background graphics, color, scaling, storyboard, cells, timing, editing, and surface rendering. Screening and discussion of selected animated short films and videos. Prerequisites: ART100, or ART111, or ART116, or permission of instructor.

MMT/ART185
3-D Modeling for Animation
3 credit(s) 6 period(s) lecture + lab
Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements that make computer models-curves, surfaces, nurbs, and polygons. 3-D translation, shading, materials, and rendering. Prerequisites: ART/MMT184 or ART/MMT184AC or permission of the instructor.

MMT/ART190
Art of Web Site Design
3 credit(s) 6 period(s) lecture + lab
Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language (HTML), digital text, and graphics. Discussion of color, proportion, typography and Web-specific design principles. Emphasizes design of cross-browser compatible interfaces that optimize usability, accessibility and browser interoperability. Prerequisites: ART100, or permission of Instructor. CIS133DA recommended.

MMT/ART190AA
Art of Website Design I
1 credit(s) 2 period(s) lecture + lab
Introduction to design production for websites. Layout, typography and presentation style for HTML (Hyper Text Markup Language). Design of mock-ups using digital design software to produce artistic form and content for the Web using Hyper Text Markup Language, digital text, and graphics. Prerequisites: ART100, or permission of Instructor. CIS133DA recommended.
MMT216  
Multimedia Project Management  
3 credit(s) 6 period(s) lecture + lab  
Interactive video and multimedia project management including defining, analyzing, designing, and validating interactive/multimedia applications; building and managing development and production teams; planning, budgeting, and scheduling; interactive/multimedia authoring; project implementation; and writing RFP’s (Request For Proposal).  
Prerequisites: CIS/MMT140, or permission of Instructor.

MMT292  
Multimedia Update  
1 credit(s) 2 period(s) lecture + lab  
Exploration and comparative analysis of the newest hardware and software products and packages on the market designed to enhance or replace existing multimedia technology.  
Prerequisites: CIS/MMT140 or permission of Instructor.

MTC – Music: Theory/Composition

MTC101  
Introduction to Music Theory  
3 credit(s) 3 period(s) lecture  
Designed to develop written and aural skills necessary for advanced study of music theory and skills. Recommended for music majors.  
Prerequisites: None.

MTC103  
Introduction to Aural Perception  
2 credit(s) 2 period(s) lecture  
An introduction to the aural skills necessary to hear relationships of intervals, rhythms, melody, and harmony in music. May be repeated for a total of four (4) credit hours.  
Prerequisites: None.

MTC105  
Music Theory I  
3 credit(s) 3 period(s) lecture  
The chronological study of music theory including: harmony, melody, texture, structure and timbre through analysis, original compositions and basic exercises to demonstrate musical concepts.  
Prerequisites: MTC100 or MTC101 or permission of instructor.  
Corequisite: MTC106.

MTC106  
Aural Perception I  
1 credit(s) 2 period(s) lecture + lab  
The development of listening and performing skills through dictation, sight singing and keyboard harmony.  
Prerequisites: None.  
Corequisite: MTC105.

MTC/TCM120  
Introduction to Sound Design for Film and Video  
3 credit(s) 5 period(s) lecture and lab  
Basic principles of recording and mixing sound for film and video. Includes voice over, automatic dialog replacement (ADR), foley, ambience, special effects and music. Emphasis on analog and digital recording techniques in the field as well as in a controlled environment.  
Prerequisites: (TCM100 and TCM136) or permission of instructor.

MTC155  
Music Theory II  
3 credit(s) 3 period(s) lecture  
A continuation of Music Theory I with emphasis on harmony and part-writing procedures.  
Prerequisites: MTC105.  
Corequisites: MTC156.

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MTC156
Aural Perception II
1 credit(s) 2 period(s) lecture + lab
A continuation of Aural Perception I, including harmonic practices. Prerequisites: None. Corequisites: MTC155.

MTC190
Computer-Aided Music Notation
3 credit(s) 4 period(s) lecture + lab
Introduction to computer-aided music notation, culminating in editing and producing publication-quality music scores. Ability to read music notation required. Prerequisites: Permission of instructor.

MTC191
Electronic Music I
3 credit(s) 4 period(s) lecture + lab
An introduction to producing music with Musical Instrument Digital Interface (MIDI) configuration consisting of computers, printers, synthesizers, and other compatible MIDI instruments. Prerequisites: None.

MTC192
Electronic Music II
3 credit(s) 4 period(s) lecture + lab
Continued study of the production of music with Musical Instrument Digital Interface (MIDI) configurations. Emphasis on more complex configurations and their applications in song arrangements. Prerequisites: MTC191.

MTC193
Computer-Based Sound Synthesis
3 credit(s) 4 period(s) lecture + lab
Principles of sound synthesis using computer-based methods. Synthesis methods include subtractive, additive, frequency modulation, sample and synthesis, and hybrid. Emphasis on synthesis techniques for use in electronic music. Prerequisites: MTC191 or permission of instructor.

MTC205 MUS2222
Music Theory III
3 credit(s) 3 period(s) lecture
The study of chromatic harmony and melody, modulation techniques and expanded chords. The analysis of formal structure. Prerequisites: MTC155. Corequisites: MTC206.

MTC206 MUS2222
Aural Perception III
1 credit(s) 2 period(s) lecture + lab
A development of listening and performing skills, including an introduction of chromatic harmonic techniques and concepts of style. Prerequisites: None. Corequisites: MTC205.

MTC/TCM220
Advanced Sound Design for Film and Video
3 credit(s) 5 period(s) lecture and lab
Explores techniques and advanced applications used in designing sound using original student footage on a non-linear editing system. Prerequisites: MTC/TCM120 or permission of instructor.

MTC240
Composition
3 credit(s) 0.6 period(s) lecture + lab
Introduction to the basics of music composition, stressing techniques and procedures for developing original ideas. May be repeated for total of twelve (12) credit hours. Prerequisites: (MTC105 and MTC106, or equivalent), and permission of instructor.

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MTC255
Music Theory IV
3 credit(s) 3 period(s) lecture
A continuation of Music Theory III, including 20th century theories and techniques. **Prerequisites:** MTC205. **Corequisites:** MTC256.

MTC256
Aural Perception IV
1 credit(s) 2 period(s) lecture + lab
A continuation of Aural Perception III, including extended chords. **Prerequisites:** None. **Corequisites:** MTC255.

MUC – Music: Commercial/Business

MUC109
Music Business: Merchandising and the Law
3 credit(s) 3 period(s) lecture
Operation, scope, and career opportunities in the music business. Focuses on music in the marketplace, songwriting, publishing, copyright procedures, and business affairs, agents, artist management, and concert production. **Prerequisites:** None.

MUC110
Music Business: Recording and Mass Media
3 credit(s) 3 period(s) lecture
The operation, scope, and career opportunities in the music business. Focuses on the record industry; environmental music; uses of music in radio, telecommunications, and film; and career options. **Prerequisites:** None.

MUC111
Digital Audio Workstation I (DAW I)
3 credit(s) 5 period(s) lecture + lab
Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file management. **Prerequisites:** MUC195 or MUC195AA.

MUC112
Digital Audio Workstation II (DAW II)
3 credit(s) 5 period(s) lecture + lab
Use of digital mixing and automation software in conjunction with editing and recording. Includes computer operation, troubleshooting, and file management. **Prerequisites:** MUC111.

MUC195
Studio Music Recording I
3 credit(s) 5 period(s) lecture + lab
Basic principles of studio sound recording. Emphasis on musical acoustics, operation of recording equipment, studio setups, and multitrack recording. Includes studio session process and musical production decisions. **Prerequisites:** None.

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MUC196
Studio Music Recording II
3 credit(s) 5 period(s) lecture + lab
Emphasis on signal-processing equipment, mixing consoles, and advanced musical recording session procedures, production, and engineering. Includes mix-down and resultant master tape of a musical recording session. **Prerequisites:** MUC195 or MUC195AA.

MUC197
Live Sound Reinforcement I
3 credit(s) 3 period(s) lecture + lab
Basic principles of live sound engineering. Emphasis on signal flow, acoustic, sound reinforcement set-ups and installation, signal processing, microphone selections and placement. Includes setting up sound systems and mixing live music. **Prerequisites:** None.

MUC198
Live Sound Reinforcement II
3 credit(s) 3 period(s) lecture
Emphasis on musical production decisions. Front-of-house and monitor console placement, loudspeaker arrangements, power considerations, program material and sound pressure levels. Includes setting up of sound system and mixing live performances with various styles of music. In addition to mixing at alternate locations. **Prerequisites:** MUC197.

MUC295
Studio Music Recording III
3 credit(s) 6 period(s) lecture + lab
Producing and engineering a recording project. Covers how recording studios work and how recording projects are organized from pre-production through delivery of the final mix. **Prerequisites:** MUC196.

MUC295AA
Self Promotion for Music
1 credit(s) 1 period(s) lecture
Career goal development. Includes self-presentation and communication skills, keeping files and records, and developing self-promotional materials. **Prerequisites:** None.

MUC297AA
Music Internship
1 credit(s) 1 period(s) lecture + lab
Music Internship work experience in a business or industry. Eighty (80) hours of designated work per credit. A maximum of 12 credits allowed. **Prerequisites:** Permission of department.

MUC297AB
Music Internship
2 credit(s) 2 period(s) lecture + lab
Music Internship work experience in a business or industry eighty (80) hours of designated work per credit. A maximum of 12 credits allowed. **Prerequisites:** MUC110.

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Revised: 9/2/2011; 10/28/11; 12/7/11
MUP – Music: Performance

**MUP101, MUP151, MUP201, MUP251**

Private Instruction

1 credit(s) 0.6 period(s) lecture + lab

Private Instruction emphasizing developmental improvement of musicianship and technique from an entering skill level. Four course sequence required of all music majors meeting departmental requirements. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar, percussion, and harp. May be repeated for credit. **Prerequisites:** None.

**MUP102, MUP152, MUP202, MUP252**

Private Instruction

2 credit(s) 1.2 period(s) lecture + lab

Private instruction emphasizing musicianship, literature, technique and performance. Four course sequence designed for university transfer equivalency. Instruction provided on voice, piano, harpsichord, organ, guitar, trumpet, French horn, trombone, baritone horn, tuba, flute, oboe, clarinet, bassoon, saxophone, violin, viola, violoncello, contrabass, bass guitar, percussion, and harp. May be repeated for credit. **Prerequisites:** None.

**MUP110**

Concert Music

0.5 credit(s) 0.5 period(s) lecture

Attendance at concerts, recitals and music lectures on and off campus. Required each semester for all music majors. **Prerequisites:** None.

**MUP131**

Class Piano I

2 credit(s) 3 period(s) lecture + lab

Development of beginning piano techniques and the fundamentals of music including basic hand position, music reading skills of melodic and harmonic material, major scales, transposition, and harmonizations including the I, IV, V7 chords. **Prerequisites:** None.

**MUP132**

Class Piano II

2 credit(s) 3 period(s) lecture + lab

Continuation of Piano I with emphasis on elementary piano techniques including major and minor scales, transposition, improvisation, and sight reading. **Prerequisites:** MUP131 or permission of instructor.

**MUP133**

Class Voice I

2 credit(s) 3 period(s) lecture + lab

Introduction to the fundamentals of vocal production. Emphasis on breathing techniques, tone production and performances in class of solo vocal literature. **Prerequisites:** None.

**MUP134**

Class Voice II

2 credit(s) 3 period(s) lecture + lab

Continuation of Class Voice I including the elements of stage presence and diction. **Prerequisites:** MUP133 or permission of instructor.

**MUP150**

Community Chorus

1 credit(s) 3 period(s) lecture + lab

A mixed chorus with emphasis on college/community participation and preparation of a variety of choral literature for public performance. Auditions may be required. May be repeated for credit. **Prerequisites:** None.

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MUP153
Concert Choir
2 credit(s) 5 period(s) lecture + lab
A mixed choir designed to emphasize choral techniques and performance of all styles of choral literature. Public performances are scheduled each semester. Prerequisites: None. Course Notes: Auditions may be required. MUP153 may be repeated for credit.

MUP155
Handbell Choir (Bell Canto)
1 credit(s) 3 period(s) lecture + lab
Emphasis on practical and performing skills in bell ringing. Preparation of all styles of bell literature. Scheduled public performances during the year. Prerequisites: None. Course Note: May be repeated for credit.

MUP157
Women’s Chorus
1 credit(s) 3 period(s) lecture + lab
A women’s chorus designed to emphasize choral technique and performance of all styles of appropriate choral literature. Public performances are scheduled during the year. Auditions may be required. May be repeated for credit. Prerequisites: None.

MUP160
Orchestra
2 credit(s) 5 period(s) lecture + lab
A class designed to emphasize orchestral ensemble techniques and the preparation of all styles of orchestral literature. Public performances are scheduled during the year. Auditions may be required. May be repeated for credit. Prerequisites: None.

MUP161
Community Band
1 credit(s) 3 period(s) lecture + lab
Emphasis on college/community participation and the preparation of wind literature for public performance. Auditions may be required. May be repeated for credit. Prerequisites: None.

MUP162
Band
2 credit(s) 5 period(s) lecture + lab
A class designed to emphasize instrumental techniques and the preparation of all styles of band literature. Public performances are scheduled during the year. Auditions may be required. May be repeated for credit. Prerequisites: None.

MUP163
Jazz Ensemble
1 credit(s) 3 period(s) lecture + lab
Practical and performance experience in various jazz styles. Open to all students on the basis of auditions. May be repeated for credit. Prerequisites: None.

MUP164
Jazz Improvisation I
2 credit(s) 2 period(s) lecture
Theoretical and performance skills in many styles of jazz improvisation. May be repeated for a total of six (6) credit hours. Prerequisites: None.

MUP165
Jazz Improvisation II
2 credit(s) 3 period(s) lecture
Intermediate theoretical and performance skills in many styles of jazz improvisation. May be repeated for a total of six (6) credit hours. Prerequisites: MUP164 or permission of instructor.

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MUP181  
Chamber Music Ensembles  
1 credit(s) 2 period(s) lecture + lab  
Practical and performance experience in instrumental, vocal, and mixed ensembles. May be repeated for credit.  
Prerequisites: None.

MUP182  
Chamber Singers  
1 credit(s) 3 period(s) lecture + lab  
Practical and performance experience in various styles of vocal music. Open to all students on the basis of auditions. May be repeated for credit.  
Prerequisites: None.

MUP225  
Class Guitar I  
2 credit(s) 3 period(s) lecture + lab  
Emphasis on note-reading and folk-style harmonic accompaniment. Includes finger-style playing. Stresses development of efficient practicing techniques and proper sitting and hand positions.  
Prerequisites: None.

MUP226  
Class Guitar II  
2 credit(s) 3 period(s) lecture + lab  
Note-reading range including second position and parts of higher positions. Classical, popular, Latin, and other styles of music. Theory including scales, keys, and chord construction. Technical exercises of both hands.  
Prerequisites: MUP225 or permission of instructor.

MUP227  
Class Guitar III  
2 credit(s) 3 period(s) lecture + lab  
Additional fingerboard positions. Ensemble techniques and performance.  
Prerequisites: MUP226 or permission of instructor.

MUP228  
Class Guitar IV  
2 credit(s) 3 period(s) lecture + lab  
Advanced fingerboard positions. Duet and trio performances. Advanced ensemble techniques.  
Prerequisites: MUP227 or permission of instructor.  
Course Notes: MUP228 may be repeated for credit.

MUP231  
Class Piano III  
2 credit(s) 3 period(s) lecture + lab  
Development of intermediate piano techniques including selected solo literature, transposition of harmonic patterns, and secondary dominants.  
Prerequisites: MUP132 or permission of instructor.

MUP232  
Class Piano IV  
2 credit(s) 3 period(s) lecture + lab  
Continuation of Piano III including modulation techniques, improvisation of piano accompaniments, advanced chromatic harmony, and sight reading of advanced literature.  
Prerequisites: MUP231 or permission of instructor.

MUP233  
Class Voice III  
2 credit(s) 3 period(s) lecture + lab  
Interpretive singing through a closer examination of coloring, tone production, dynamics, and tempo indications.  
Prerequisites: MUP134.

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MUP234
Class Voice IV
2 credit(s) 3 period(s) lecture + lab
Emphasis on the preparation of solo vocal literature for the purpose of evaluation and the integration of the music with the drama of the music. **Prerequisites:** MUP233 or permission of Instructor. **Course Notes:** MUP234 may be repeated for credit.

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**NAV – Navajo**

**NAV101**
Elementary Navajo I
4 credit(s) 4 period(s) lecture
Basic grammar, pronunciation, and vocabulary of the Navajo language. Practice of listening, speaking, reading, and writing skills. Includes the study of the Navajo culture with participation in an off-campus Navajo cultural event. **Prerequisites:** None.

**NAV102**
Elementary Navajo II
4 credit(s) 4 period(s) lecture
Continued study of grammar, pronunciation, and vocabulary of the Navajo language. Emphasis on listening, speaking, reading, and writing skills. **Prerequisites:** NAV101 or permission of department. **Course Note:** Includes the study of the Navajo culture with participation in an off-campus Navajo cultural event.

**NAV115**
Beginning Navajo Conversation I
3 credit(s) 3 period(s) lecture
Beginning conversational Navajo with emphasis on basic listening and speaking skills, including basic pronunciation, vocabulary, sentence structure, and cultural awareness. **Prerequisites:** None.

**NAV116**
Beginning Navajo Conversation II
3 credit(s) 3 period(s) lecture
Continued development of speaking and listening skills for effective communication in Navajo. Focuses on vocabulary for home, community, schools, and businesses. **Prerequisites:** NAV115, or departmental approval.

**NAV201**
Intermediate Navajo I
4 credit(s) 4 period(s) lecture
Continued study of the Navajo language. Continued practice and development of listening, speaking, reading, and writing skills. Emphasis on fluency and accuracy of the Navajo language. Includes continued study of Navajo people and cultures. **Prerequisites:** NAV102 or permission of department.

**NAV202**
Intermediate Navajo II
4 credit(s) 4 period(s) lecture
Continued study of the Navajo language. Continued practice and development of listening, speaking, reading, and writing skills. Emphasis on fluency and accuracy of the Navajo language. Includes continued study of Navajo people and cultures. **Prerequisites:** NAV201 or permission of department.

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NAV225
Intermediate Navajo Conversation I
3 credit(s) 3 period(s) lecture
Continued development of skills in conversational Navajo. A review of the major grammatical and pronunciation elements. Prerequisites: NAV116, or equivalent, or permission of instructor.

NAV226
Intermediate Navajo Conversation II
3 credit(s) 3 period(s) lecture
Continued development of skills in conversational Navajo with a review of grammatical elements. Prerequisites: NAV225, or equivalent, or permission of instructor.

NUR – Nursing Science: Basic

NUR151
Nursing Theory and Science I
10 credit(s) 20 period(s) lecture & lab
Introduction to fundamentals of nursing theory and practice utilizing critical thinking based on the nursing process and principles of evidence based practice. Focus on meeting basic human needs within the wellness/illness continuum. Theoretical concepts related to holistic care of well, geriatric, and adult clients. Provides safe nursing care to clients with selected alterations in health. Introduction to professional nursing practice. Applies concepts of health promotion, disease/illness prevention. Provides care based upon integration of pathophysiology, nutrition, communication and physical, biological, and psycho-social sciences. Uses information technology in performing and evaluating client care. Prerequisites: Admission into the Nursing Program.

NUR158
Nurse Assisting
6 credit(s) 4 period(s) lecture
0 credit(s) 6 period(s) lab
Introduction to the role of the nursing assistant for clients across the wellness/illness continuum within the nurse assisting scope of practice. Includes basic problem solving processes specific to meeting the basic and holistic needs of clients, therapeutic communication skills essential for the nursing assistant, interventions to ensure the needs and safety of the client, specific types of diseases, conditions and alterations in behavior of the client, and principles of nutrition and fluid balance. Focus is on special needs of the elder client in the acute and long-term care settings, and basic emergency care skills and procedures. Provides opportunity for the development of clinical competency in the performance of selected nurse assisting skills and procedures through participation in the care of clients. Prerequisites: Completed Health and Safety Documentation Form (proof of immunity or immunizations for Rubella, Rubeola, Mumps, Varicella, Hepatitis B, Td, current TB testing, current HealthCare Provider CPR card and current Fingerprint Clearance Card) and completed Health Care Provider Signature form.

NUR171
Nursing Theory and Science II
8 credit(s) 16 period(s) lecture & lab
Application of nursing theory and practice utilizing critical thinking based on the nursing process and evidence based practice. Holistic nursing concepts of health promotion, disease/illness prevention, and health restoration for adult and geriatric clients. Role development as the professional nurse member of the health care team. Participation in client teaching and discharge planning. Application of previous knowledge of physical, biologic, psycho-social sciences, and the cultural and spiritual aspects of nursing care. Application of nursing concepts in the development of plan of care to include pathophysiology, nutrition, pharmacology, and skills in communication. Uses information technology in planning, documenting, and evaluating client care. Prerequisites: NUR151 or permission of Nursing Department Chairperson.

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NUR191  
Practical Nursing Transition  
3 credit(s) 5 period(s) lecture + lab  
Overview of the role of the practical nurse in care of clients. Includes nursing standards and scope of practice of the practical nurse. Emphasis on nursing care related to pediatric and care of the well childbearing client and childbearing family. Focus on the role of practical nurse in providing care through interventions consistent with established nursing care plans. **Prerequisites:** NUR171 or permission of Nursing Department Chair.

NUR251  
Nursing Theory and Science III  
8 credit(s) 16 period(s) lecture & lab  
Application of critical thinking strategies related to holistic care of the newborn, pediatric, and childbearing clients. Integration of concepts related to holistic care of adults and geriatric clients with selected acute and chronic alterations in health. Integration of professional nursing standards in role development. Utilization of previous knowledge of physical, biologic, psycho-social sciences, and the cultural, spiritual aspects of nursing care. Integration of concepts of nutrition, pharmacology, communication, health promotion, and pathophysiology into nursing care. **Prerequisites:** (BIO202, BIO205, and NUR171) or permission of Nursing Department Chairperson.

NUR271  
Nursing Theory and Science IV  
7 credit(s) 13 period(s) lecture & lab  
Integration of critical thinking strategies for complex holistic needs of high-risk clients with multi-system health alterations. Application of strategies related to holistic care of the client with psychiatric/mental health disorders. Introduction to community based care. Assimilation of professional role into practice. Evaluation of care based on the knowledge of physical, biologic, psycho-social sciences, and the cultural and spiritual beliefs of clients. Development of nurse leadership and management roles. Integration of concepts of nutrition, pharmacology, communication, health promotion, and pathophysiology into nursing care. **Prerequisites:** NUR251 or permission of Nursing Department Chairperson.

NUR291  
Nursing Clinical Capstone  
2 credit(s) 6 period(s) lab  
Synthesis of the nursing process to facilitate role transition from student to graduate nurse within a preceptorship experience. Development of nurse leadership and management roles. **Prerequisites:** NUR271 or permission of Nursing Department Chairperson.

NVH – Navajo Humanities

NVH245  
Navajo Culture and Heritage  
3 credit(s) 3 period(s) lecture  
Survey of the Navajo people, including their history, culture/aesthetics, education, spirituality, and language. **Prerequisites:** None.

OAS – Office Automation Systems

OAS101AB  
Computer Typing I: Letters, Tables, and Reports  
1 credit(s) 1.7 period(s) lecture + lab  
Letter, table, and report formatting. **Prerequisites:** OAS101AA or permission of department/division.

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OAS101AC
Computer Typing I: Production and Manuscript
1 credit(s) 1.7 period(s) lecture + lab
Simple office projects and manuscripts. Prerequisites: OAS101AB or permission of department/division.

OAS102
Computer Typing II:
Document Production
3 credit(s) 5 period(s) lecture + lab
Arrangement of letters, memos, manuscripts, and tabulation; speed/accuracy improvement. Prerequisites: OAS101 or permission of department/division.

OAS103AA
Computer Typing: Skill Building I
1 credit(s) 1.7 period(s) lecture + lab
Individual progression on speed/accuracy drills. Prerequisites: Ability to touch type at 25 words per minute or permission of department/division.

OAS103AB
Computer Typing: Skill Building II
1 credit(s) 1.7 period(s) lecture + lab
Progression on speed/accuracy drills. Prerequisites: OAS103AA or permission of department/division.

OAS103AC
Computer Typing: Skill Building III
1 credit(s) 1.7 period(s) lecture + lab
Progression on speed/accuracy drills. Prerequisites: OAS103AB or permission of department/division.

OAS106
Basic Machine Transcription
3 credit(s) 5 period(s) lecture + lab
Mastery of transcribing techniques with emphasis on language skills and document formatting. Prerequisites: OAS101, or permission of department/division.

OAS108
Business English
3 credit(s) 3 period(s) lecture
(Days in Fall and evenings in Spring)
Comprehensive coverage of correct use of English grammar including spelling, punctuation, capitalization, and number style mechanics in a business context. Prerequisites: None.

OAS/BPC111AA
Computer Keyboarding I
1 credit(s) 1.7 period(s) lecture + lab
Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. Prerequisites: None.

OAS113
Micro-Alphabetic Indexing
1 credit(s) 1.7 period(s) lecture + lab
Mastery of essential microcomputer filing skills. Emphasis on indexing and alphabetizing individual and business names; subject, geographic, and numeric methods; and cross-referencing. Prerequisites: None.

OAS118
10-Key by Touch
1 credit(s) 1.7 period(s) lecture + lab
Touch system of numeric keys on ten-key pads. Prerequisites: None.

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OAS121
Techniques of Proofreading
1 credit(s) 1 period(s) lecture + lab
Recognition of errors in mechanics, format, and content in any written communication. Prerequisites: ENG101, or OAS108, or permission of instructor.

OAS125
Introduction to the Professional Office
3 credit(s) 3 period(s) lecture
Expectations of the professional in the electronic office of today. Realistic and practical coverage of roles, responsibilities, and environment. Prerequisites: None.

OAS/BPC130DK
Beginning Word
1 credit(s) 2 period(s) lecture
Using Word for Windows to create, edit, and print documents. Prerequisites: Ability to keyboard a minimum of 20 wpm or permission of instructor.

OAS/BPC135DK
Word: Level I
2 credit(s) 2 period(s) lecture
Using Word word processing software to create and name files, edit text, format, and print a variety of documents. Prerequisites: None.

OAS181
Medical Office: Vocabulary
3 credit(s) 3 period(s) lecture
Basic medical vocabulary with emphasis on pronunciation, spelling, and definition. Prerequisites: None.

OAS201
Computer Typing III: Advanced
Document Production
3 credit(s) 5 period(s) lecture + lab
Mastery of skills and techniques used in the production of letter, manuscript, and statistical documents; decision making; business/industry standards emphasized. Prerequisites: OAS102 or minimum typing speed of 50 wpm or permission of department/division.

OAS218
Law Office Procedures
3 credit(s) 3 period(s) lecture
Law office procedures for general and specialty areas of law, including civil, estate planning and probate, business organizations, real estate, and litigation. Coverage of law office personnel, timekeeping, billing, filing, docket control, research, office equipment, legal forms, ethics, and professional associations. Prerequisites: (LAS101, OAS201, and OAS225), or permission of program director or department chair.

OAS220
Professional Legal Secretary
4 credit(s) 4 period(s) lecture
Study of entry-level secretarial duties, including employment options; ethical conduct with office staff and the public; maintaining a professional image; preparing correspondence and other documents such as affidavits and acknowledgments; handling mail; performing calendaring, docketing, timekeeping, and billing tasks; and preparing and organizing office files; using legal vocabulary; preparing and processing legal documents relating to probate, wills, contracts, real estate, business organizations, litigation pleadings including service of process, domestic relations, and bankruptcy; studying the state and federal court systems, civil and criminal procedures; using proper captions and citation format; and notary public responsibilities. Prerequisites: (LAS101, OAS201, and OAS225), or permission of program director or department chair.

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OAS225
Legal Document Preparation
2 credit(s) 3 period(s) lecture + lab
Introduction to legal terminology and the techniques of keyboarding legal documents. **Prerequisites:** OAS102 or permission of department/division.

OAS/BPC235DK
Word: Level II
2 credit(s) 2 period(s) lecture
Using Word word processing software to create and name files, edit text, format, and print a variety of documents. **Prerequisites:** BPC/OAS135DK or permission of instructor.

OAS237
Medical Transcription I
3 credit(s) 5 period(s) lecture + lab
Development of transcription skills in the medical area. Includes operation and care of computers, diskettes, transcribers, and dictation media. Emphasis on accuracy, use of reference materials, formatting, style, and proofreading. **Prerequisites:** (OAS102, OAS106, OAS181 or HIT170 or HUC170, or equivalent) or permission of department/division.

OAS238
Advanced Machine Transcription/Legal
3 credit(s) 5 period(s) lecture + lab
Development of recorded transcription skills in the legal area. Includes operation of information processing equipment, transcription, and dictation media. Emphasis on transcribing speed and accuracy and use of reference materials. **Prerequisites:** OAS102, OAS106, or permission of department/division.

OAS241
Medical Transcription II
3 credit(s) 6 period(s) lecture + lab
Continuation of medical transcription skills with emphasis on speed and accuracy; general medicine, surgery, radiology dictation. **Prerequisites:** OAS237, or permission of department/division.

OAS242
Medical Transcription III
3 credit(s) 6 period(s) lecture + lab
Mastery of transcription skills used in the production of health records and medical reports; emphasis on speed and accuracy. **Prerequisites:** OAS241, or permission of department/division.

OAS246
Medical Transcription Internship
1 credit(s) 5 period(s) lab
Eighty (80) hours of medical transcription experience in an office setting. Supervision by on-the-job supervisor; evaluation by supervisor and college coordinator. Emphasis on application of medical transcription skills. **Prerequisites:** OAS241 and permission of instructor or program director.

PED – Physical Education

PED101
Physical Activities: Basic
1 credit(s) 2 period(s) lecture + lab
Individual, dual, or team sports activities at the basic level. **Prerequisites:** None. **Course Note:** PED101 may be repeated for credit.

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PED102
Physical Activities: Intermediate
1 credit(s) 2 period(s) lecture + lab
Individual, dual, or team sports activities at the intermediate level. Prerequisites: None. Prior experience recommended. Course Note: PED102 may be repeated for credit.

PED103
Physical Activities: Basic
0.5 credit(s) 1 period(s) lecture + lab
Individual, dual, or team sports activities at the basic level. Prerequisites: None. Course Note: PED103 may be repeated for credit.

PED105
Army Master Fitness
1 credit(s) 3 period(s) lecture + lab
Introduces the student to the Army Master Fitness Program. Designed to enhance the student's level of individual fitness and wellness. Prerequisites: None. Course Note: The course is taught at the ASU Tempe Campus. Contact the Army ROTC Department.

PED111
Aerobics
1.5 credit(s) 3 period(s) lecture + lab
Aerobic activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm-up/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. Prerequisites: None.

PED113
Weight Training
1.5 credit(s) 3 period(s) lecture + lab
Weight training activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm-up/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. Prerequisites: None.

PED114
Fitness
1.5 credit(s) 3 period(s) lecture + lab
Fitness activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm-up/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. Prerequisites: None. Course Note: PED114 may be repeated for credit.

PED115
Lifetime Fitness
2 credit(s) 4 period(s) lecture + lab
Fitness activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm-up/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. Prerequisites: None. Course Note: PED115 may be repeated for credit.

PED116
Aerobics for Wellness
2 credit(s) 4 period(s) lecture + lab
Aerobic activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm-up/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. Prerequisites: None. Course Note: PED116 may be repeated for a total of eight (8) credits.

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PED117
Weight Training for Wellness
2 credit(s) 4 period(s) lecture + lab
Weight training activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warm-up/stretch, selected endurance/strength exercises, and cool down/stretch. **Prerequisites:** None. **Course Note:** PED117 may be repeated for a maximum of eight (8) credits.

PED201
Physical Activities: Advanced
1 credit(s) 2 period(s) lecture + lab
Individual, dual, or team sports activities at the advanced level. **Prerequisites:** None. Prior experience at competitive level recommended. **Course Note:** PED201 may be repeated for credit.

PHI – Philosophy

PHI101 Introduction to Philosophy
3 credit(s) 3 period(s) lecture
General consideration of human nature and the nature of the universe. Knowledge, perception, freedom and determinism, and the existence of God. **Prerequisites:** None.

PHI103 Introduction to Logic
3 credit(s) 3 period(s) lecture
Informal logic, logical fallacies, elementary symbolic logic, analysis of argument forms, and construction of proofs for validity. **Prerequisites:** ENG101 or ENG107 or equivalent.

PHI105 Introduction to Ethics
3 credit(s) 3 period(s) lecture
Major theories of conduct. Emphasis on normative ethics, theories of good and evil from Plato to the present. **Prerequisites:** None.

PHI212 Contemporary Moral Issues
3 credit(s) 3 period(s) lecture
Philosophical consideration of such moral issues as civil disobedience, preferential treatment, abortion, privacy, sexual morality, and poverty and hunger. **Prerequisites:** None.

PHI213 Medical and Bio-Ethics
3 credit(s) 3 period(s) lecture
A philosophical consideration of moral problems that arise in relation to medicine and biology, e.g., death, patient rights and biological experimentation. **Prerequisites:** None.

PHI216 Environmental Ethics
3 credit(s) 3 period(s) lecture
Philosophical consideration of diverse theories and perspectives on the environment, and application of these theories to global moral issues such as animal rights, preservation of wilderness and species, population, world hunger and poverty, and air and water pollution. **Prerequisites:** None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
PHI218
Philosophy of Sexuality
3 credit(s) 3 period(s) lecture
Philosophical examination of sexuality in human life. Historical and critical survey of philosophical and theological views. Comparison and evaluation of contemporary theories about the nature of sexual desire and sexual acts. Implications of theories for contemporary moral problems. Prerequisites: None.

PHS – Physical Science

PHS110
Fundamentals of Physical Science
4 credit(s) 6 period(s) lecture & lab
Survey of the principles of physics and chemistry. Prerequisites: Grade of "C" or better in MAT090, or MAT091, or MAT092, or MAT093, or equivalent, or satisfactory score on Math placement exam.

PHY – Physics

PHY101
Introduction to Physics
4 credit(s) 6 period(s) lecture & lab
A survey of physics emphasizing applications of physics to modern life. Prerequisites: Grade of "C" or better in MAT090, or MAT091, or MAT092, or MAT093, or equivalent, or satisfactory score on Math placement exam. Course Note: Students may receive credit for only one of the following: PHY101 or PHY101AA.

PHY111
General Physics I
4 credit(s) 6 period(s) lecture & lab
Includes motion, energy, and properties of matter. Prerequisites: MAT182, or MAT187, or one year high school Trigonometry with a grade of “C” or better, or permission of Department or Division. Course Note: PHY111 is recommended for preprofessional and suggested for certain other majors. Students may receive credit for only one of the following: PHY111 or PHY111AA.

PHY112
General Physics II
4 credit(s) 6 period(s) lecture & lab
Includes electricity, electromagnetism, and modern physics. Prerequisites: PHY105 or PHY111.

PHY121
University Physics I: Mechanics
4 credit(s) 6 period(s) lecture & lab
Kinematics, Newton's laws, work, energy, momentum, conservation laws, dynamics of particles, solids, fluids, mechanical waves, and sound. Prerequisites: MAT220, or MAT221, or permission of Department or Division. One year of High School physics or PHY111 and PHY112 suggested but not required.

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PHY131
University Physics II: Electricity and Magnetism
4 credit(s) 6 period(s) lecture & lab
Electric charge and current, electric and magnetic fields in vacuum and in materials, and induction. AC circuits, displacement current, and electromagnetic waves. **Prerequisites:** MAT230, or MAT231, or permission of Department or Division, and PHY121. **Corequisites:** MAT241 or permission of Department or Division.

POS – Political Science

POS099
United States Citizenship Preparation
1 credit(s) 1 period(s) lecture
Introduction to American history, constitution, and political institutions as required for the Naturalization (admission to US citizenship) exam. **Prerequisites:** None.

POS110
American National Government
3 credit(s) 3 period(s) lecture
Study of the historical backgrounds, governing principles, and institutions, of the national government of the United States. **Prerequisites:** None.

POS115
Issues in American Politics
3 credit(s) 3 period(s) lecture
Examination of major issues in current affairs in the fields of politics, economics, social relations, foreign affairs, aesthetics, and others through the reading and viewing of secondary information sources. **Prerequisites:** ENG101 or ENG107 or equivalent.

POS120
World Politics
3 credit(s) 3 period(s) lecture
Introduction to the principles and issues relating to the study of international relations. Evaluation of the political, economic, national, and transnational rationale for international interactions. **Prerequisites:** None.

POS125
Issues in World Politics
3 credit(s) 3 period(s) lecture
Contemporary issues and factors in international relations. Stress conditions in civil order, trade and international institutions. May be repeated for a total of six (6) credit hours. **Prerequisites:** None.

POS130
State and Local Government
3 credit(s) 3 period(s) lecture
Survey of state and local government in the United States. Special attention on Arizona State Government. **Prerequisites:** None.

POS140
Comparative Government
3 credit(s) 3 period(s) lecture
Overview and evaluation of the sub-field of comparative politics. Covers various national governments from around the world: their structure, system, method of governance. Examines methods of assessing these governments. **Prerequisites:** None.

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POS180  
United Nations Studies  
3 credit(s) 3 period(s) lecture + lab  
Historical origins, structural makeup, political and operational characteristics, and legal activities of the United Nations. Analysis of the overall institution's ongoing utility, productivity and creativity. **Prerequisites:** None.

POS210  
Political Ideologies  
3 credit(s) 3 period(s) lecture  
Survey of twentieth century nondemocratic ideologies and movements with emphasis on Marx, Lenin, Mussolini, Hitler, Stalin and Mao. **Prerequisites:** None.

POS220  
U.S. and Arizona Constitution  
3 credit(s) 3 period(s) lecture  
Examination of the United States Constitution and the constitution and government of the State of Arizona. **Prerequisites:** None.

POS221  
Arizona Constitution  
1 credit(s) 1 period(s) lecture  
Examination of the Constitution of the State of Arizona. Equivalent to the second part of POS220. May not enroll in POS220 and POS221 concurrently. **Prerequisites:** None.

POS222  
U.S. Constitution  
2 credit(s) 2 period(s) lecture  
Examination of the United States Constitution. Equivalent to the first part of POS220. May not enroll in POS220 and POS222 concurrently. **Prerequisites:** None.

POS223  
Civil Rights  
3 credit(s) 3 period(s) lecture  
The historic background and current status of major civil rights issues in the United States. **Prerequisites:** None.

POS/CCS230  
Public Policy and Civic Engagement: César Chávez Legacy  
3 credit(s) 3 period(s) lecture + lab  
Exploration of democratic citizenship in a multicultural society. Focus on the role of the activist in public policy service, community organizing, and social change strategies such as communication, social movement theory perspectives, and how leaders maintain movement momentum. Interpretation of the vision, philosophy, and work of César E. Chávez; and accomplishments by citizens (individually and collectively) in social change and opposition. Special emphasis on community engagement participation. **Prerequisites:** None. **Course Notes:** POS230 requires a minimum of 16 hours of civic engagement participation with community partners.

POS280  
Internship Orientation  
1 credit(s) 1 period(s) lecture  
Preparation for an internship experience and appropriate intern behavior. **Prerequisites:** Permission of instructor.

POS281AA  
Public Policy/Service Internship  
2 credit(s) 2 period(s) lab  
Field experience in community service, public policy or public service. May be repeated for a total of nine (9) POS281 credit hours; may not repeat specific internship assignment. **Prerequisites:** Minimum of 15 credit hours at college granting internship with minimum GPA of 3.0 and permission of instructor. Prerequisite or Corequisite: POS280.

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Revised: 9/2/2011; 10/28/11; 12/7/11
POS281AB
Public Policy/Service Internship
3 credit(s) 3 period(s) lab
Field experience in community service, public policy or public service. May be repeated for a total of nine (9) POS281 credit hours; may not repeat specific internship assignment. **Prerequisites:** Minimum of 15 credit hours at college granting internship with minimum GPA of 3.0 and permission of instructor. **Prerequisite or Corequisite:** POS280.

POS281AC
Public Policy/Service Internship
4 credit(s) 4 period(s) lab
Field experience in community service, public policy or public service. May be repeated for a total of nine (9) POS281 credit hours; may not repeat specific internship assignment. **Prerequisites:** Minimum of 15 credit hours at college granting internship with minimum GPA of 3.0 and permission of instructor. **Prerequisite or Corequisite:** POS280.

POS282AA
Volunteerism for Political Science: A Service Learning Experience
1 credit(s) 1 period(s) lab
Service-learning field experience within government agencies, political organizations, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of four (4) POS282 credit hours; may not repeat specific agency assignment for more than two (2) credit hours. Standard grading available according to procedures outlined in catalog. **Prerequisites:** Permission of instructor.

POS282AB
Volunteerism for Political Science: A Service Learning Experience
2 credit(s) 2 period(s) lab
Service-learning field experience within government agencies, political organizations, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of four (4) POS282 credit hours; may not repeat specific agency assignment for more than two (2) credit hours. Standard grading available according to procedures outlined in catalog. **Prerequisites:** Permission of instructor.

POS282AC
Volunteerism for Political Science: A Service Learning Experience
3 credit(s) 3 period(s) lab
Service-learning field experience within government agencies, political organizations, citizen advocacy groups, and human service organizations/agency. **Prerequisites:** Permission of instructor. **Course Note:** May be repeated for a total of four (4) POS282 credit hours; may not repeat specific agency assignment for more than two (2) credit hours. Standard grading available according to procedures outlined in catalog.

POS285
Public Policy
3 credit(s) 3 period(s) lecture + lab
Introduction to public policy, how policy is made, and how public policy decisions are effected. **Prerequisites:** None.

PSY – Psychology

PSY101 PSY1101
Introduction to Psychology
3 credit(s) 3 period(s) lecture
To acquaint the student with basic principles, methods and fields of Psychology such as learning, memory, emotion, perception, physiological, developmental, intelligence, social and abnormal. **Prerequisites:** None.

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PSY/CFS130
Demystifying Adolescence
1 credit(s) 1 period(s) lecture
A holistic overview of the physical, social, and emotional development of adolescents. Emphasis on effective skills necessary for working with adolescents and their families. Prerequisites: None.

PSY132
Psychology and Culture
3 credit(s) 3 period(s) lecture
Presents current knowledge about human diversity in behavior and culture using examples from a variety of contexts and nations. Highlights topics in cross-cultural psychology, such as intergroup relations, ethnocentrism, gender, personality, emotion, language, communication, work and health. Emphasis on applications of behavioral and cognitive principles to enhance interactions in a multicultural world. Prerequisites: None.

PSY143
Lesbian, Gay, Bisexual and Transgendered Studies
3 credit(s) 3 period(s) lecture
Introduction to the study of lesbian, gay, bisexual, and transgendered individuals. Includes psychological, developmental, social, biological, historical and cultural aspects. Review of research literature regarding the etiology and assessment of sexual orientation, prejudice, and discrimination, and family issues. Current issues in lesbian/gay/bisexual/trans-gendered studies. Prerequisites: None.

PSY201AA-AC
Selected Issues in Psychology
1-3 credit(s) 1-3 period(s) lecture
In-depth investigation of topical issues in Psychology. Promotes understanding of the psychological theory, application, and critical reasoning about the selected psychological issues and topics. Potential topics may include, but are not limited to, parenting, gender, applied cognitive psychology, personality, perception, applied-experimental interventions, motivation, emotion, cultural psychology, methodology paradigms, history and systems, development, and intelligence. May be repeated with change of topic. Prerequisites: PSY101 or permission of instructor.

PSY215
Introduction to Sport Psychology
3 credit(s) 3 period(s) lecture
Application of the psychological, behavioral, social, cognitive, and humanistic perspectives in psychology to sport. Includes topics such as optimal performance, correlation, motivation, co-action effect, self-actualization, psycho-behavioral techniques, self-efficacy, and the general health benefits of sport participation. Prerequisites: PSY101 with a grade of 'C' or better or permission of instructor.

PSY218
Health Psychology
3 credit(s) 3 period(s) lecture
Behavioral and mental foundations of health, wellness, illness, and disease, and psychological dimensions of medical intervention. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor.

PSY230
Introduction to Statistics
3 credit(s) 3 period(s) lecture
An introduction to basic concepts in descriptive and inferential statistics, with emphasis upon application to psychology. Consideration given to the methods of data collection, sampling techniques, graphing of data, and the statistical evaluation of data collected through experimentation. Required of psychology majors. Prerequisites: PSY101 with a grade of 'C' or better and MAT092 or equivalent, or permission of instructor.

PSY231
Laboratory for Statistics
1 credit(s) 2 period(s) lab
Applications of inferential and descriptive statistics to computers in the field of psychology. Corequisites: PSY230.

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PSY240
Developmental Psychology
3 credit(s) 3 period(s) lecture
Human development from conception through adulthood. Includes: physical, cognitive, emotional and social capacities that develop at various ages. Recommended for students majoring in nursing, education, pre-med, and psychology. Prerequisites: PSY101 with a grade of 'C' or better or permission of the instructor.

PSY250
Social Psychology
3 credit(s) 3 period(s) lecture
The scientific study of how people’s thoughts, feelings, and behaviors are influenced by other people and situations. Includes how we think about ourselves and others, persuasion and influence, sexual and romantic attraction, friendship and helping others, aggression and prejudice. Prerequisites: PSY101 with a grade of 'C' or better or permission of the instructor.

PSY266
Abnormal Psychology
3 credit(s) 3 period(s) lecture
Distinguishes between normal behavior and psychological disorders. Subjects may include stress disorders, problems with anxiety and depression, unusual and abnormal sexual behavior, schizophrenia and addictive behaviors. Causes and treatments of psychological problems and disorders are discussed. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor.

PSY277
Psychology of Human Sexuality
3 credit(s) 3 period(s) lecture
Survey of psychological and physiological aspects of human sexual behavior. Emphasis placed on the integration of the cognitive, emotional, and behavioral factors in sexual functioning. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor. Student must be 18 years or older.

PSY290AB
Research Methods
4 credit(s) 6 period(s) lecture & lab
Planning, execution, analysis, and written reporting of psychological research using American Psychological Association guidelines (APA). Surveys the literature, procedures, and instruments in representative areas of psychological research. Prerequisites: ENG101 or ENG107. Prerequisites or Corequisites: PSY230 with a grade of "C" or better, or permission of instructor.

PSY298
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

RDG – Reading

In college, most courses involve reading and studying. Thus it is critical for students to know and apply appropriate skills that will enhance academic progress and success. The Reading Department offers a wide variety of reading/study-based courses at different levels. These courses have been designed to develop and improve students’ skills so that they can attain personal and/or academic goals. Please Note: For CRE (Critical Reading) courses, see page 1102.

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RDG008
Phonics
3 credit(s) 3 period(s) lecture
Designed for students who are learning English as a second language. Includes the study of the speech sounds used in English as represented by the written symbols of the alphabet; recognition of spelling patterns and resulting pronunciation; and diacritical markings. **Prerequisites:** Reading placement score (CELSA).

RDG010
Reading English as a Second Language I
3 credit(s) 3 period(s) lecture
Designed for students who are learning English as a second language. Provides students with skills needed to become proficient readers in English. Teaches sound symbol relationships of the English alphabet. Expands essential vocabulary for daily communication both in isolation and context. Includes development of reading comprehension skills. **Prerequisites:** Appropriate ESL placement test score.

RDG020
Reading English as a Second Language II
3 credit(s) 3 period(s) lecture
Designed for students who are learning English as a second language. Includes continued development of vocabulary and reading comprehension skills. **Prerequisites:** Appropriate ESL placement test score or grade of "C" or better in RDG010 or permission of instructor.

RDG030
Reading English as a Second Language III
3 credit(s) 3 period(s) lecture
Designed for students who are learning English as a second language. Includes instruction for more advanced vocabulary and reading comprehension skills. **Prerequisites:** Appropriate ESL placement test score or grade of "C" or better in RDG020 or permission of instructor.

RDG031
Advanced Vocabulary for ESL Speakers (Non-Native Speakers)
3 credit(s) 3 period(s) lecture
Designed to expand and improve reading vocabulary skills. Emphasis on understanding advanced vocabulary in both context and isolation through practice and review. Vocabulary building strategies which will aid in ongoing study of words. Emphasis on both learning and using more advanced vocabulary effectively. **Prerequisites:** RDG020 with grade of C or better, or permission of instructor. **Course Note:** Recommended for reading students at ESL Levels III and IV.

RDG040
Reading English as a Second Language IV
3 credit(s) 3 period(s) lecture
Developed for students of English as a second language. Includes development of advanced vocabulary, comprehension skills, and culture awareness. **Prerequisites:** Appropriate ESL placement test score or grade of "C" or better in RDG030 or permission of instructor.

RDG071
Basic Reading
3 credit(s) 3 period(s) lecture
Provide opportunities for practice and application of basic reading skills. Includes phonic analysis, word recognition, structural analysis, use of context clues, and use of dictionary, reinforced through practical application. Development of vocabulary required for success in content area courses. Emphasis on literal comprehension and development of inferential interpretation. **Prerequisites:** Appropriate reading placement test score, or grade of "C" or better in RDG040. **Course Note:** Recommended for all students with limited reading experiences.

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RDG081
Reading Improvement
3 credit(s) 3 period(s) lecture
Designed to improve basic reading skills. Includes word recognition, interdisciplinary vocabulary development, recognizing patterns of organization, interpreting inference. Reviews interpreting graphic materials. Emphasis on identifying main ideas and related details. Prerequisites: Appropriate reading placement test score, or grade of "C" or better in RDG071.

RDG091
College Preparatory Reading
3 credit(s) 3 period(s) lecture
Designed to improve basic reading and study skills, vocabulary and comprehension skills. Recommended to all students whose placement test scores indicate a need for reading instruction. Prerequisites: Appropriate reading placement test score, or grade of "C" or better in RDG081.

RDG100
College Study Skills
3 credit(s) 3 period(s) lecture
Analysis of learning styles and development of individual learning strategies. Introduction of library research techniques. Emphasis on learning and study techniques applicable to any college course. Prerequisites: Grade of "C" or better in RDG091 or permission of instructor.

RDG100AC
Exam Taking and Reference Skills
1 credit(s) 1 period(s) lecture
Emphasis on successful exam taking, concentration skills, effective use of library and reference materials. Also includes preparation of written and oral reports using specific guidelines. Prerequisites: None.

REA – Real Estate

REA179
Real Estate Principles I
3 credit(s) 3 period(s) lecture
Basics of real estate principles including introduction to the profession and license law, definition of real property, legal descriptions, rights and interests in property, ownership, contracts, real estate economics, financing and foreclosure, land use, and valuation. Prerequisites: None.

REA180
Real Estate Principles II
3 credit(s) 3 period(s) lecture
Advanced work in real estate including escrow procedures and title insurance, liens and encumbrances, advanced contracts, water rights, toxic waste and environmental hazards, agency, ethics and professional relationships, real estate code and the Commissioner's rules, investment, property management, and government restrictions. Prerequisites: REA179 or permission of instructor.

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REA201  
Real Estate Principles I and II  
6 credit(s) 6 period(s) lecture  
Comprehensive survey of real estate principles to include careers in real estate, nature and description of real estate, rights and interests in land, forms of real property ownership, forms of business organization, methods of title transfer, title search and insurance, contract law, real estate sales contracts, mortgage and notes payable, deeds of trust, lending practices, loans and consumer rights, sources of financing real estate loans, types of financing instruments, real property taxes and assessments, title closing, escrow and settlement procedures, property management and real estate leases, real estate appraisal, state licensing laws and professional affiliations, real estate brokerage, real estate agency, fair housing and equal credit laws, types of residential real estate, real property insurance, land use control, economics of real estate, and investment considerations. **Prerequisites:** None. **Course Note:** This course is intended to satisfy the state of Arizona's requirement for 90 hours of prelicensure education. Students must attend all scheduled class meetings to meet the State’s attendance requirement.

REA290AC  
Real Estate Seminar: Updates in Appraisals  
0.25 credit(s) 0.25 period(s) lecture  
Survey of current appraisal methodologies and any updates to the industry in this area, including procedures and legal implications. **Prerequisites:** (REA180 or REA201 or current Arizona Real Estate License) or permission of department. **Course Note:** Completion of this module can be applied toward continuing education hour requirements for Arizona Real Estate License renewal.

REA290AD  
Real Estate Seminar: Updates in Property Management  
0.25 credit(s) 0.25 period(s) lecture  
Survey of current property management topics, opportunities in professional property management, and any updates to the industry in this area, including procedures and legal implications. **Prerequisites:** (REA180 or REA201 or current Arizona Real Estate License) or permission of department. **Course Note:** Completion of this module can be applied toward continuing education hour requirements for Arizona Real Estate License renewal.

REA290AF  
Real Estate Seminar: Updates in Financing  
0.25 credit(s) 0.25 period(s) lecture  
Survey of current mortgage financing and trends in alternative financing methods and the legal implications. **Prerequisites:** (REA180 or REA201 or current Arizona Real Estate License) or permission of department. **Course Note:** Completion of this module can be applied toward continuing education hour requirements for Arizona Real Estate License renewal.

REA290AG  
Real Estate Seminar: Updates in Investing  
0.25 credit(s) 0.25 period(s) lecture  
Survey of real estate as an investment vehicle. Includes demonstration of investment analysis methods and the current economic environment as it relates to investment. **Prerequisites:** (REA180 or REA201 or current Arizona Real Estate License) or permission of department. **Course Note:** Completion of this module can be applied toward continuing education hour requirements for Arizona Real Estate License renewal.

REA290AH  
Real Estate Seminar: Contract Writing  
0.5 credit(s) 0.5 period(s) lecture  
Contract writing skills, techniques, and requirements. Writing of basic real estate contracts, including purchase offers, counter offers, sales listing agreements, and riders. **Prerequisites:** None.

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REA290AI
Real Estate Seminar: Broker-Agent Relationship
0.25 credit(s) 0.25 period(s) lecture
Survey of the relationship obligations, concerns, and issues between a real estate broker and the sales agent. Prerequisites: (REA180 or REA201 or current Arizona Real Estate License) or permission of department. Course Note: Completion of this module can be applied toward continuing education hour requirements for Arizona Real Estate License renewal.

REA290AL
Real Estate Seminar: Professional Agent Practice Management
0.25 credit(s) 0.25 period(s) lecture
Provides topical advice of how to establish and manage a professional sales agent practice. Prerequisites: (REA180 or REA201 or current Arizona Real Estate License) or permission of department. Course Note: Completion of this module can be applied toward continuing education hour requirements for Arizona Real Estate License renewal.

REA290AM
Real Estate Seminar: Mathematics for the Real Estate Agent
0.25 credit(s) 0.25 period(s) lecture
Provides topical review and reinforcement of mathematics used in the real estate industry. Prerequisites: (REA180 or REA201 or current Arizona Real Estate License) or permission of department. Course Note: Completion of this module can be applied toward continuing education hour requirements for Arizona Real Estate License renewal.

REC – Recreation

REC120
Leisure and the Quality of Life
3 credit(s) 3 period(s) lecture
Overview of the historical, psychological, social, and cultural aspects of play, leisure, and recreation and their role in contemporary society. Nature of play and leisure behavior in human development within different cultures and the contribution play, recreation, and leisure make to the quality of life for individuals in today's society. Prerequisites: None.

REC150AA
Outdoor Adventure Skills Field Experience
1 credit(s) 2 period(s) lab
Practical application of camping and outdoor skills including camping, equipment selection and use, cooking, fire building, camp programs, backpacking, and safety. Prerequisites: None. Course Note: Course may be repeated for a total of four (4) credits.

REC210
Leisure Delivery Systems
3 credit(s) 3 period(s) lecture
Systematic study of Delivery of Leisure Services in public, commercial, and independent sectors; particular emphasis placed on the urban setting. Prerequisites: None.
REL – Religious Studies

REL203/ AIS213
American Indian Religions
3 credit(s) 3 period(s) lecture
Tribal traditions of the peoples native to North American, and pan-Indian religions in the twentieth century. Prerequisites: ENG101 or ENG107 or equivalent.

REL205
Religion and the Modern World
3 credit(s) 3 period(s) lecture
Introduction to the nature and role of religious beliefs and practices in shaping the lives of individuals and societies, with particular attention to the modern world. Prerequisites: ENG101, or ENG107, or equivalent.

REL212
Introduction to Islam
3 credit(s) 3 period(s) lecture
Introduction to history, scriptures, practices and impact of Islam. Prerequisites: None.

REL243
World Religions
3 credit(s) 3 period(s) lecture
The development of various religions from the prehistoric to modern times. Political, economic, social and geographic relationships among world religions. Consideration of both Eastern and Western religions. Prerequisites: None.

REL270
Introduction to Christianity
3 credit(s) 3 period(s) lecture
The nature and content of the Christian tradition developed over time, with overview of the New Testament, major historical trends and figures, major Christian ideas and practices, and survey of denominations. Prerequisites: None.

SBS – Small Business Management

SBS216
Planning for a Small Business
2 credit(s) 2 period(s) lecture
Relates business management issues to a specific small business through development of an individual study plan. Provides on-site review of business operation by trained instructor. Prerequisites: SBS200 and SBS204 or permission of instructor.

SBU – Society and Business

SBU200
Society and Business
3 credit(s) 3 period(s) lecture
The study and scientific inquiry of issues and demands placed on business enterprise by owners, customers, government, employees and society. Included are social, ethical and public issues and analysis of the social impact of business responses. Prerequisites: None.

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SLG – Sign Language

Also see Interpreter Preparation, IPP on page 174.

SLG090AA
Speedy Sign Language I
1 credit(s) 1 period(s) lecture

SLG090AB
Speedy Sign Language II
1 credit(s) 1 period(s) lecture
Use American Sign Language (A.S.L.) to converse about feelings, family members, other people, clothing, events according to proper tense, and to count to one hundred. Prerequisites: SLG090AA.

SLG101
American Sign Language I
4 credit(s) 4 period(s) lecture

SLG102
American Sign Language II
4 credit(s) 4 period(s) lecture
Continued development of knowledge and language skills for communicating with deaf people who sign. Includes numbers, fingerspelling, and culture. Emphasis on enhancement of receptive sign skills and continued development of expressive sign skills. Application of rudimentary, syntactical, and grammatical structure stressed with continued development of sign vocabulary. Prerequisites: SLG101, with a grade of “C” or better, or permission of department/division.

SLG103
Introduction to Deafness
1 credit(s) 1 period(s) lecture
History and development of American Sign Language (A.S.L.) and English codes. Overview of education for Deaf and Hard of Hearing children. Legal rights and common adaptive devices used by Deaf and Hard of Hearing individuals. Prerequisites: None.

SLG110
Fingerspelling I
2 credit(s) 2 period(s) lecture
Introduction to basic fingerspelling techniques. Concentration on receptive and expressive skills including manual alphabet production and numbers. Focus on methods, theory, and applications. Prerequisites: SLG101, or permission of department/division.

SLG120
Fingerspelling II
2 credit(s) 2 period(s) lecture
Continued skill development including speed, dexterity, clarity, and loan signs. Advanced use of numbers, prefixes, suffixes, and polysyllabic words. Prerequisites: SLG102, SLG110 with a grade of “C” or better, or permission of department/division.

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Revised: 9/2/2011; 10/28/11; 12/7/11
SLG200
Issues and Aspects of Deafness
3 credit(s) 3 period(s) lecture
Implications of laws pertaining to educational choices and rights of deaf and hearing impaired individuals. Local, state, and national organizations, activities, and agencies affecting the deaf community. Prerequisites: SLG102 with C or better, or permission of Department or Division.

SLG201
American Sign Language III
4 credit(s) 4 period(s) lecture
Linguistics of American Sign Language (A.S.L.) including non-manual behaviors and signing English idioms with conceptual accuracy. Emphasis on practical application of A.S.L. skills, expanded vocabulary, and cross-cultural communication. Prerequisites: SLG102, with a grade of "C" or better, or permission of department/division. Suggested but not required: (ENG101 or ENG107) and (CRE101 or CRE111 or exemption by score on the reading placement test (ASSET)).

SLG202
American Sign Language IV
4 credit(s) 4 period(s) lecture
Advanced American Sign Language skills including continued vocabulary. Emphasis on conversational techniques in a cross-cultural framework. Continued work on conceptual accurate signing of English idioms and words with multiple meanings. Prerequisites: SLG201 with C or better, or permission of Department or Division. ENG101, SLG200, and (CRE101, or CRE111, or exemption by score on the reading placement test) suggested but not required.

SLG203
American Sign Language V
4 credit(s) 4 period(s) lecture
Advanced study of vocabulary, classifiers, use of space, and grammatical features of American Sign Language (ASL). Includes evaluation of changes that occur in ASL as a living language. Advanced use of ASL in demonstrations, reports, and presentations. Prerequisites: SLG202, with a grade of "C" or better.

SLG204
Comparative Linguistics: ASL/English
3 credit(s) 3 period(s) lecture
A variety of topics about linguistics of American Sign Language and English including phonology, morphology, lexicon, syntax, discourse, and language acquisition. Aspects of using sign language and how visual languages differ and are similar to spoken language. Prerequisites: SLG202. Corequisites: SLG203.

SLG212
Deaf Culture
3 credit(s) 3 period(s) lecture
Linguistic, social, educational, and political issues in deaf culture. Values and group identity issues as related to heritage and literature. Special emphasis on the cultural and philosophical attitudes shared with other minority groups. Prerequisites: SLG202 or permission of department/division.

SOC – Sociology

SOC101
Introduction to Sociology
3 credit(s) 3 period(s) lecture
Fundamental concepts of social organization, culture, socialization, social institutions and social change. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
SOC140
Racial and Ethnic Minorities
3 credit(s) 3 period(s) lecture
Contemporary/Historical racial and ethnic intergroup relations emphasizing cultural origins, developments, and problems of minority groups in the United States. **Prerequisites:** None.

SOC157
Sociology of Marriage and Family
3 credit(s) 3 period(s) lecture
The study of courtship, marriage, and family patterns, their historical development, their adaptation to a changing culture, and their impact on individuals. **Prerequisites:** None.

SOC212
Gender and Society
3 credit(s) 3 period(s) lecture
A study of the way culture shapes and defines the positions and roles of both men and women in society. Major emphasis on social conditions which may lead to a broadening of gender roles and a reduction of gender role stereotypes and the implications of these changes. Open to both men and women. **Prerequisites:** None.

SOC245
Social Deviance
3 credit(s) 3 period(s) lecture
A sociological analysis of social deviance including a review of theories, individual and social implications of deviant labeling, and relevant aspects of social control. **Prerequisites:** SOC101.

SOC251
Social Problems
3 credit(s) 3 period(s) lecture
A sociological exploration of selected social problems and inequalities. Analyzes issues in health care, dependencies, crime/violence, inequalities in race/class/gender/region/age, family, education, work, the economy, population migration/immigration, the environment, war and global insecurity. **Prerequisites:** None.

**SPA – Spanish**

**SPA085AA**
Speedy Spanish I
1 credit(s) 1 period(s) lecture
Basic vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. **Prerequisites:** None.

**SPA085AB**
Speedy Spanish II
1 credit(s) 1 period(s) lecture
Intermediate development of vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. **Prerequisites:** SPA085AA.

**SPA085AC**
Speedy Spanish III
1 credit(s) 1 period(s) lecture
Advanced development of vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. **Prerequisites:** SPA085AB.

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SPA086
Review of Speedy Spanish
0.5 credit(s) 0.5 period(s) lecture
Review of very basic vocabulary and grammar to help develop conversational skills in Spanish. Emphasis on speaking skills. Prerequisites: SPA085AC, or department approval.

SPA101
Elementary Spanish I
4 credit(s) 4 period(s) lecture
Basic grammar, pronunciation and vocabulary of the Spanish language. Includes the study of Spanish-speaking cultures. Practice of listening, speaking, reading, and writing skills. Prerequisites: None.

SPA102
Elementary Spanish II
4 credit(s) 4 period(s) lecture
Continued study of grammar and vocabulary of the Spanish language and study of Spanish-speaking cultures. Emphasis on speaking, reading, and writing skills. Prerequisites: SPA101 or permission of Department or Division.

SPA103
Elementary Spanish for Spanish Speakers I
4 credit(s) 4 period(s) lecture
Review of basic Spanish grammar and pronunciation. Emphasis on reading and writing skills in Spanish. For native speakers needing review of essential language skills. Prerequisites: Spanish-speaking or departmental approval.

SPA104
Elementary Spanish for Spanish Speakers II
4 credit(s) 4 period(s) lecture
Continued review of grammatical problems in speaking and writing and reading in Spanish. Prerequisites: SPA103 or equivalent or departmental approval.

SPA115
Beginning Spanish Conversation I
3 credit(s) 3 period(s) lecture
Basic pronunciation, vocabulary, sentence structures, and cultural awareness, necessary to develop speaking and listening skills in Spanish. Prerequisites: None.

SPA116
Beginning Spanish Conversation II
3 credit(s) 3 period(s) lecture
Continued study of basic pronunciation, vocabulary, sentence structures, and a cultural awareness necessary to develop speaking and listening skills in Spanish. Prerequisites: SPA115 or permission of department or division.

SPA117
Health Care Spanish I
3 credit(s) 3 period(s) lecture
Basic conversational Spanish for health care workers or students. Emphasis on basic sentence structure, pronunciation and vocabulary used in health care settings. Prerequisites: None.

SPA118
Health Care Spanish II
3 credit(s) 3 period(s) lecture
Basic conversational Spanish for health care personnel or students. Emphasis on basic sentence structure, pronunciation, and vocabulary used in health care settings. Prerequisites: SPA117 or (SPA117AA and SPA117AB and SPA117AC), or permission of department.

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SPA201 Intermediate Spanish I
4 credit(s) 4 period(s) lecture
Continued study of essential Spanish grammar and Spanish-speaking cultures. Continued practice and development of reading, writing, and speaking skills in Spanish. Emphasis on fluency and accuracy in spoken Spanish. Prerequisites: SPA102, or SPA111, or permission of Department or Division.

SPA202 Intermediate Spanish II
4 credit(s) 4 period(s) lecture
Review of grammar, continued development of Spanish language skills with continued study of the Spanish-speaking cultures. Prerequisites: SPA201, or permission of Department or Division.

SPA203 Spanish for Spanish-Speaking Students I
4 credit(s) 4 period(s) lecture
Designed for Spanish-speaking students. Emphasis on written composition, grammar review, punctuation and spelling, literature and conversation. May be taken in lieu of SPA201. Prerequisites: Permission of instructor or Department Chair.

SPA204 Spanish for Spanish-Speaking Students II
4 credit(s) 4 period(s) lecture
Designed for Spanish-speaking students. Advanced study of Spanish grammar, composition, literature, and conversation. May be taken in lieu of SPA202. Prerequisites: SPA203, or SPA201, or permission of instructor or Department Chair.

SPA225 Intermediate Spanish Conversation I
3 credit(s) 3 period(s) lecture
Continued study of vocabulary, sentence structures, and cultural awareness necessary to improve speaking and listening skills in Spanish. Emphasis on fluency and accuracy in spoken Spanish. Prerequisites: SPA116, or SPA102 or permission of department or division.

SPA226 Intermediate Spanish Conversation II
3 credit(s) 3 period(s) lecture
Continued study of vocabulary, sentence structures, and cultural awareness necessary to improve speaking and listening skills in increasingly complex Spanish. Emphasis on fluency and moderate accuracy in spoken Spanish. Prerequisites: SPA225, or SPA201 or the equivalent or permission of department or division.

SPA235 Advanced Spanish Conversation I
3 credit(s) 3 period(s) lecture
Continued development of skills in conversational fluency. Class conducted completely in Spanish. Prerequisites: SPA226 or equivalent or departmental approval.

SPA236 Advanced Spanish Conversation II
3 credit(s) 3 period(s) lecture
Further development of skills in conversational fluency. Grammar presented only to clarify student errors. Prerequisites: SPA235, or equivalent, or departmental approval.

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### SPA237
**Spanish Legal Terminology**
3 credit(s) 3 period(s) lecture
Emphasis on legal terminology, including specific vocabulary and linguistic structures. Conducted entirely in Spanish. **Prerequisites:** SPA202, or equivalent, or permission of instructor.

### SPA240
**Spanish for City Courts**
3 credit(s) 3 period(s) lecture
Emphasis on English to Spanish and from Spanish to English interpreting for misdemeanor cases in City Courts. Familiarizes students with the City Court system and standards for interpreting. **Prerequisites:** SPA202, or SPA204, or permission of instructor.

### SPA265
**Advanced Spanish I**
3 credit(s) 3 period(s) lecture
Introduction and study of Spanish and Spanish-American literature. Selected readings from most Spanish-speaking countries. All discussions, oral reports, and written assignments are in Spanish. **Prerequisites:** SPA202 or departmental approval.

### SPA266
**Advanced Spanish II**
3 credit(s) 3 period(s) lecture
Further study of Spanish and Spanish-American literature. Reading selections from most Spanish-speaking countries. All oral reports, discussions, and written reports in Spanish. Graduated level of difficulty from the literature studies in SPA265. **Prerequisites:** SPA265 or departmental approval.

### SPA268
**Legal Translation: English to Spanish**
3 credit(s) 3 period(s) lecture
A practical experience involving the translation of legal documents and texts from English to Spanish. Practice includes translating and analyzing various types of legal documents. **Prerequisites:** [SPA237 and (Fluent oral and written proficiency in Spanish and English or SPA266)], or permission of instructor.

### SPA269
**Legal Translation: Spanish to English**
3 credit(s) 3 period(s) lecture
A practical experience involving the translation of legal documents and texts from Spanish to English. Practice includes translating and analyzing various types of legal documents. **Prerequisites:** [SPA237 and (Fluent oral and written proficiency in Spanish and English or SPA266)], or permission of instructor.

### SPA270
**Teacher Bilingual Certification Exam Preparation**
1 credit(s) 1 period(s) lecture
Practice Spanish for the State of Arizona Spanish Proficiency Exam for Bilingual Certified Teachers. **Prerequisites:** SPA226, or permission of department.

### SPA282AA
**Volunteerism for Spanish: A Service Learning Experience**
1 credit(s) 1 period(s) lab
Service-learning field experience within private/public agencies, and citizen volunteer groups. May be repeated for a total of four (4) SPA282 credit hours. Standard grading available according to procedures outlined in catalog. **Prerequisites:** Permission of instructor.

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SPA282AB
Volunteerism for Spanish: A Service Learning Experience
2 credit(s) 2 period(s) lab
Service-learning field experience within private/public agencies, and citizen volunteer groups. May be repeated for a total of four (4) SPA282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of instructor.

SPA282AC
Volunteerism for Spanish: A Service Learning Experience
3 credit(s) 3 period(s) lab
Service-learning field experience within private/public agencies, and citizen volunteer groups. May be repeated for a total of four (4) SPA282 credit hours. Standard grading available according to procedures outlined in catalog. Prerequisites: Permission of instructor.

SPH – Spanish Humanities

SPH151
Latin American Literature in Translation
3 credit(s) 3 period(s) lecture
(Spring only)
Continuation of SPH150. Other representative works of Latin American literature from the modernist movement to the present covered in English translation. Knowledge of Spanish not required. Prerequisites: None.

SPH245
Hispanic Heritage in the Southwest
3 credit(s) 3 period(s) lecture
A survey of Hispanic heritage in the Southwest. Cultural and social institutions and their contribution to the development of the region and its heritage. Prerequisites: None.

STO – Storytelling

STO/EDU/HUM292
The Art of Storytelling
3 credit(s) 3 period(s) lecture
Explore the art and origin of storytelling. Provide a variety of storytelling techniques, styles and exercises to enhance the delivery of telling stories. Assist in the integration and application of storytelling to the learning environment in the classroom. Prerequisites: None.
SWU – Social Work

SWU102
Introduction to Social Work
3 credit(s) 3 period(s) lecture
An introduction to the fields within the area of social work through a study of the disciplines of social case work, social group work, and community organization. Opportunities to experience the various techniques of practice within each discipline. Required for students enrolled in the associate degree program of the social work curriculum. **Prerequisites:** Eligibility for ENG101 and CRE101.

SWU/J AS225
Statistics for Social Research/Justice and Government
3 credit(s) 3 period(s) lecture
Introductory course in descriptive and inferential statistics for social research. Designed to serve as preparation for interpreting and understanding research related to justice and Government related agencies. **Prerequisites:** MAT092 or completion of higher level mathematics course.

SWU275AA
Case Report Writing I
1 credit(s) 1 period(s) lecture
Documentation skills for human service helpers. Includes privacy and legal issues. **Prerequisites:** None.

SWU282AA-AC
Volunteerism for Social Work: A Service Learning Experience
1-3 credit(s) and 1-3 period(s) lab
Service-learning field experience within private/public agencies, and citizen volunteer groups. May be repeated for a total of six (6) SWU282 credit hours; may not repeat specific assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. **Prerequisites:** Permission of instructor.

SWU285
Social Services Seminar
1 credit(s) 1 period(s) lecture
Special topics in social services with an emphasis on current issues not covered in other Social Work courses. **Prerequisites:** None. **Course Note:** May be repeated for a total of four 4 credit hours.

SWU291
Social Service Delivery Systems
3 credit(s) 3 period(s) lecture
Purposes, structures, and delivery systems of human service agencies. Includes 40 hours of volunteer experience in local human service agencies. **Prerequisites or Corequisites:** SWU102, or SWU171, or permission of the department.

SWU292
Effective Helping in a Diverse World
3 credit(s) 3 period(s) lecture
Introduction to professional helper communication skills with respect to cross-cultural practice and diversity issues, in a social work setting. **Prerequisites:** None. (SOC101 and SWU102) or SWU171 suggested but not required.

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TCM – Telecommunications

**TCM100**  
Digital Multi Media  
3 credit(s) 3 period(s) lecture + lab  
Introduction to the major components of a multi media project. **Prerequisites:** None.

**TCM/VPT104**  
Scriptwriting  
3 credit(s) 3 period(s) lecture  
Script writing process, including developing objectives, writing research agendas, designing content outlines writing a treatment, writing a training script, marketing script, and dramatic training script. Dramatic motion picture screen play format, the dramatic curve, believable character creation and dialog and creation of the first ten pages of a screenplay. **Prerequisites:** None.

**TCM/VPT114**  
Audio for Video and Media  
3 credit(s) 5 period(s) lecture and lab  
Audio in media production including Electronic News Gathering (ENG) and Electronic Field Production (EFP), studio and Sound Room for corporate, cable and broadcast applications. Microphones and audio recording equipment: audio production techniques using a Shot Gun Boom microphone while in the field; audio recording in the sound room; multi-track recording and layback; audio editing using a non-linear computer program: music libraries: sound effects: video tape editing in audio post-production. **Prerequisites:** None.

**TCM/MTC120**  
Introduction to Sound Design for Film and Video  
3 credit(s) 5 period(s) lecture and lab  
Basic principles of recording and mixing sound for film and video. Includes voice over, automatic dialog replacement (ADR), foley, ambience, special effects and music. Emphasis on analog and digital recording techniques in the field as well as in a controlled environment. **Prerequisites:** (TCM100 and TCM136) or permission of instructor.

**TCM/MTC220**  
Advanced Sound Design for Film and Video  
3 credit(s) 5 period(s) lecture and lab  
Explores techniques and advanced applications used in designing sound using original student footage on a non-linear editing system. **Prerequisites:** MTC/TCM120 or permission of instructor.

**TCM241AB**  
Introduction to Non-linear Editing: Final Cut Pro  
4 credit(s) 6 period(s) lecture + lab  
Introduction to editing on a non-linear editing system. **Prerequisites:** TCM136 or permission of Instructor.

**TCM242**  
Portfolio Non-Linear Editing  
2 credit(s) 4 period(s) lecture + lab  
Explores techniques and applications used in editing an individual project on a non-linear editing system. **Prerequisites:** TCM241, or TCM241AA, or TCM241AB, and independent footage. **Course Note:** TCM242 may be repeated for a total of six (6) credits.

**TCM282**  
Advanced Non-Linear Editing Techniques  
4 credit(s) 6 period(s) lecture + lab  
Explores techniques and advanced applications used in creating and editing an advanced project on a non-linear editing system. **Prerequisites:** (TCM241AA and TCM242) or permission of Instructor.

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TCM290
Professional Media Marketing
3 credit(s) 3 period(s) lecture + lab
Designed to equip media students with marketing tools for career development and promotion. **Prerequisites:** TCM136 or permission of Instructor.

TEC – Textiles and Clothing

TEC105
Cultural Aspects of Clothing
3 credit(s) 3 period(s) lecture
Psychological, aesthetic, and economic factors applied to the selection of clothing in relation to personality and figure type. **Prerequisites:** None.

TEC106
History of Fashion
3 credit(s) 3 period(s) lecture
Consideration of historic factors influencing fashion and fashion change with special emphasis on historic costume. **Prerequisites:** None.

TEC110
Basic Sewing Skills
3 credit(s) 4 period(s) lecture + lab
Basic clothing construction techniques. Use of commercial patterns and sewing machine in the construction of basic garments. **Prerequisites:** None.

TEC111
Clothing Construction
3 credit(s) 5 period(s) lecture + lab
Construction of garments applying basic construction principles and techniques using patterns suitable for the individuals and their capabilities. **Prerequisites:** None. **Course Note:** If student has no previous sewing experience, TEC110 Basic Sewing Skills should be taken prior to and not during this course. May be repeated for a total of 12 credit hours with permission of instructor.

TEC113
Textiles: Dyeing
1 credit(s) 1.5 period(s) lecture + lab
(Not offered every semester)
Demonstrations and projects emphasizing skills and techniques in creating decorative textiles for the home and apparel; tie dye and batik. **Prerequisites:** None.

TEC114
Textiles: Block Printing/Silk Screening
1 credit(s) 2 period(s) lecture + lab
(Not offered every semester)
Skills and techniques in creating decorative textiles for the home and apparel; block printing and silk screening. **Prerequisites:** None. **Course Note:** May be repeated for a total of three (3) credits.
TEC115  
Textiles: Hand Painting  
1 credit(s) 1.5 period(s) lecture + lab  
(Not offered every semester)  
Materials and techniques used to hand paint designs on textiles. Includes color theory and design development.  
Prerequisites: None. Course Notes: Course may be repeated for a total of three (3) credits.

TEC116  
Textiles: Stitchery and Embellishment  
1 credit(s) 1.5 period(s) lecture + lab  
(Not offered every semester)  
Materials and techniques used for stitchery and embellishment on textiles. Includes color schemes and design development.  
Prerequisites: None. Course Note: May be repeated for a total of three (3) credits.

TEC210  
Intermediate Clothing Construction  
2 credit(s) 4 period(s) lecture + lab  
Application of intermediate clothing and fitting techniques. Emphasis on improving basic construction skills.  
Prerequisites: TEC111 or permission of instructor. Course Note: May be repeated for a total of 8 credit hours with permission of instructor.

TEC214  
Advanced Clothing Construction  
3 credit(s) 5 period(s) lecture + lab  
Advanced garment construction techniques, pattern alteration and fit and techniques used on specialty fabrics.  
Prerequisites: TEC111 or permission of instructor. Course Note: May be repeated for a total of 12 credit hours with permission of instructor.

TEC125  
Fashion Design  
3 credit(s) 3 period(s) lecture  
Practical techniques of fashion sketching, pattern drafting, and draping. Design apparel. Prerequisites: None. TEC106 and TEC111 suggested but not required.

TEC234  
Fashion Illustration I  
3 credit(s) 5 period(s) lecture + lab  
Proportions and techniques used in drawing fashion figures and clothing. Introduction of media and illustrative styles for portfolio design, trade sketches, and fashion advertisements. Prerequisites: None.

TEC345  
Fashion Illustration II  
3 credit(s) 5 period(s) lecture + lab  
Advanced study of proportion and techniques used in drawing fashion figures and flats. Continued study of garments, fabric textures and patterns. Development of skills in presentation drawing and commencing fashion design portfolio illustrations. Prerequisites: TEC134, or permission of instructor.

TEC346  
Fashion Illustration III  
3 credit(s) 5 period(s) lecture + lab  
In depth study of illustrative styles, silhouettes, and interpretations. Advanced work with fabric textures and patterns; concentration on garment details. Continued development of a fashion design portfolio. Prerequisites: TEC135, or permission of instructor.

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TEC161
Digital Machine Embroidery Laboratory
1 credit(s) 2 period(s) lab
Use of the sewing machine and computer for development of decorative designs for garment and fabric design. 
Prerequisites: None. Course Notes: TEC161 may be repeated for a total of six (6) credits.

TEC221
Computer-Assisted Fashion Design
3 credit(s) 5 period(s) lecture + lab
(Not offered every semester)
The use of computer hardware and software in the fashion design industry. Create and illustrate fashion designs using computer hardware and software. Color and design principles applied in creating an apparel line and developing a portfolio. Prerequisites: TEC125 or permission of instructor.

TEC222
Textiles
3 credit(s) 3 period(s) lecture
Study of textile fibers and fabrics, their properties, identification, selection, use and care. Prerequisites: None.

TEC223
Tailoring
3 credit(s) 6 period(s) lecture + lab
Principles of tailoring as applied in the construction of a coat or suit. Alteration of patterns and fitting techniques. Prerequisites: TEC124 or permission of instructor. Course Note: TEC223 may be repeated for a total of 12 credit hours with permission of instructor.

TEC224
Pattern Drafting
2 credit(s) 3 period(s) lecture + lab
(Not offered every semester)
Draft patterns with measurements of dress forms and human figures. Development of slopers, blocks, and garment patterns. Design and produce an original garment using pattern drafting techniques. Prerequisites: TEC111, or permission of instructor.

TEC225
Pattern Design I
3 credit(s) 5 period(s) lecture + lab
Creative expression through flat pattern in applying principles of art to clothing design. Various resources for design inspiration. Prerequisites: (TEC110 or TEC111) or permission of instructor. Course Note: May be repeated for a total of twelve (12) credits.

TEC226
Draping for Fashion Design
3 credit(s) 5 period(s) lecture + lab
(Not offered every semester)
Manipulation of fabrics on a dress form and/or live figure to create designs and patterns. Use of a variety of woven/knit fabrics and an exploration of the many possibilities of draping to allow a creative and accurate expression of ideas. Prerequisites: (TEC110 or TEC111) or permission of instructor.

TEC227
Couture Sewing
3 credit(s) 5 period(s) lecture + lab
(Not offered every semester)
Construction techniques used in couture sewing. Includes fabric selection, fitting, fabric preparation, hand sewing, garment shaping, edge finishes, embellishments, and closures. Emphasis on couture techniques used in the construction of skirts, pants, blouses, dresses, sleeves, pockets, jackets, coats, and evening wear. Prerequisites: TEC111 or permission of instructor. Course Note: May be repeated for a total of 12 credit hours with permission of instructor.

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TEC228
Advanced Draping for Fashion Design
3 credit(s) 5 period(s) lecture + lab
(Not offered every semester)
Advanced draping techniques for fashion design. Includes draping jackets, coats, slacks, and trousers in woven fabrics and draping a variety of garments in knit fabrics. Drape and construct an original design. Prerequisites: TEC226 or permission of instructor. Corequisites: TEC225, TEC226 or permission of instructor.

TEC230
Pattern Design II
3 credit(s) 5 period(s) lecture + lab
(Not offered every semester)
Practical application in designing clothing/patterns using flat pattern method. Principles of flat pattern and use of sloper reviewed. Includes pattern grading, sizing for figure differences, and creation of an original design. Prerequisites: TEC225 or permission of instructor. Course Note: May be repeated for a total of twelve (12) credits.

TEC231
Pattern Grading
3 credit(s) 5 period(s) lecture + lab
Grading patterns to change sizes. Includes grading terminology, grading methods, types of grade, uneven grade, figure types, grading charts, blending, and grading basic and intermediate designs. Prerequisites: TEC111, or permission of instructor.

TEC233
Computer-Assisted Pattern Making
3 credit(s) 5 period(s) lecture + lab
Pattern making using the computer and various software programs. Includes measuring, block patterns, pattern development, production patterns, modifications for size and fit, and markers. Prerequisites: TEC225 or permission of instructor. Course Notes: TEC233 may be repeated for a total of twelve (12) credit hours with permission of instructor.

TEC236
Portfolio Development
1 credit(s) 1.5 period(s) lab
(Not offered every semester)
Design, produce, and present a professional portfolio. Includes material selection and techniques, customer focus, contents and organization, presentation formats, flat sketching techniques, presentation boards, and writing a resume and cover letter for potential employers. Prerequisites: (TEC135 and TEC221), or permission of instructor.

TEC270
Design Studio
1 credit(s) 1 period(s) lab
(Not offered every semester)
Design of an original garment for a line/collection. Includes sketching design, developing pattern for design, selecting fabrics for design, and construction of design. Prerequisites: TEC225 or TEC226. Course Note: Course may be repeated for a total of 4 credit hours with permission of instructor.

TEC271AA
Fashion Design Internship
1 credit(s) 5 period(s) lab
Work experience in fashion design business or industry. Five hours of work weekly. Supervision and evaluation by an internship coordinator. May be repeated for a total of three (3) credits. Prerequisites: Departmental approval.

TEC271AB
Fashion Design Internship
2 credit(s) 10 period(s) lab
Work experience in fashion design business or industry. Ten hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: Departmental approval.
TEC/MKT271AC
Fashion Design Internship
3 credit(s) 15 period(s) lab
Work experience in fashion design business or industry. Fifteen hours of work weekly. Supervision and evaluation by an internship coordinator. Prerequisites: Departmental approval.

THE – Theatre

THE111
Introduction to Theatre
3 credit(s) 3 period(s) lecture
A survey of theatre, including basic elements and principles of production, styles, and/or historical perspectives of theatre, dramatic literature, and criticism. Prerequisites: None.

THE118
Playwriting
3 credit(s) 3 period(s) lecture + lab
Practice and study of theories and techniques of writing for the stage; creating characters, dialogue, and plot for monodramas, scenes, and plays. Prerequisites: None.

THE/HUM205
Introduction to Cinema
3 credit(s) 3 period(s) lecture
Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. Prerequisites: None.

THE/HUM210
Contemporary Cinema
3 credit(s) 3 period(s) lecture
A study of contemporary films, directors and critics with emphasis on evaluating film as an art form. Prerequisites: None.

THE220 SUN THE 2220
Modern Drama
3 credit(s) 3 period(s) lecture
(Spring only)
Analysis of dramatic literature studied within political, historical, and cultural contexts and examined from the perspective of the playwright's structure and style. Prerequisites: ENG101 or ENG107 or equivalent.

THE274AC
Theatre Study Tour
3 credit(s) 15 period(s) lab
A tour that focuses on theatre production outside of the metropolitan Phoenix area. Includes a variety of experiences and activities to enhance knowledge about theatre production. Prerequisites: Department approval.

THE298AA-AC
Special Projects
1-3 credit(s) 1-3 period(s) lab
Organized and tailored around the interests and needs of the individual student. Structured to provide an atmosphere of individualized research and study paralleled by professional expertise and guidance. Professional-type facilities and equipment are made available for student use. Allows the best aspects of independent study and individualized learning to be combined to maximize student development. Prerequisites: None.

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Revised: 9/2/2011; 10/28/11; 12/7/11
THP – Theatre Performance/ Production

THP112
Acting I
3 credit(s) 4 period(s) lecture + lab
Fundamental techniques and terminology of acting through physical and vocal expression, improvisation, and monologue and scene work. Emphasis on characterization. Prerequisites: None.

THP115
Theatre Makeup
3 credit(s) 4 period(s) lecture + lab
Purposes, materials, and techniques of theatrical makeup. Prerequisites: None.

THP130
Stage Combat
3 credit(s) 4 period(s) lecture + lab
Analysis and practice of physical movement, including basic techniques in staged personal combat with and without weapons. Emphasis on stunt fighting and fencing. Prerequisites: None.

THP201AB
Theatre Production II
2 credit(s) 4 period(s) lab
Designed to give college credit to the cast and technical production crews of college theatre productions. May be repeated for up to a maximum of four (4) credits. Prerequisites: None.

THP203
Technical Theatre Production
3 credit(s) 6 period(s) lab
Designed to give college credit to the technical production crews of college theatre productions. Prerequisites: None. Course Note: THP203 may be repeated for up to a maximum of nine (9) credits.

THP211
Creative Drama
3 credit(s) 3 period(s) lecture
Theory and practice of creative drama, including improvisation, storytelling, puppetry, and script and program development in drama, and their application to elementary and secondary school levels. Prerequisites: None.

THP212
Acting II
3 credit(s) 4 period(s) lecture + lab
Fundamental techniques of acting through script analysis, rehearsal, and performance. Prerequisites: THP112 or departmental approval.

THP213
Introduction to Technical Theatre
3 credit(s) 5 period(s) lecture + lab
Procedures of technical theatre production and demonstration. Topics include design and construction of scenery; lighting and properties. Prerequisites: None.

THP215
Advanced Makeup Techniques
3 credit(s) 4 period(s) lecture + lab
Advanced character analysis and makeup design. Technical application of makeup. Prerequisites: THP115.

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THP216
Beginning Stage Lighting
3 credit(s) 4 period(s) lecture + lab
Basic theories of stage lighting for all production types. Emphasis on technical/theoretical facts, artistic/design concept development, and “teamwork” structure of theatre. Examines stage lighting optics, instrument selection and application, color theory, circuiting and control systems, and basic design. Prerequisites: THP213 or permission of instructor.

THP217
Introduction to Design Scenography
3 credit(s) 4 period(s) lecture + lab
The role of the theatre designer in creating scenic, lighting, costume, sound, and multimedia effects for stage productions. Elements of the design process and communication of dramatic themes and visions to the audience. Prerequisites: THP 213 or permission of instructor.

THP225
Visual Script Analysis
2 credit(s) 2 period(s) lecture
Theory and practice in analysis of dramatic literature for the technician and designer. Emphasis on techniques of script analysis for visual information. Prerequisites: None.

THP/COM241
Oral Interpretation of Literature
3 credit(s) 3 period(s) lecture
The study, analysis and preparation for performance of prose, poetry, and dramatic literature. Preparation of material for public audiences. Prerequisites: ENG101 or ENG107.

THP250
Stage Properties
3 credit(s) 4 period(s) lecture + lab
Introduction to stage properties including design, construction and maintenance features. Provides skills in property design and construction using an assortment of standard materials. Prerequisites: None.

THP260
Theatrical Design: Rendering
2 credit(s) 4 period(s) lecture + lab
Provides experience and explores multiple illustration techniques used to communicate ideas in entertainment production. Provides basic skills including pictorial drawing and sketching. Prerequisites: None.

THP261
Previsualization Modeling
2 credit(s) 4 period(s) lecture + lab
Provides experience and explores basic previsualization methods used to communicate ideas in entertainment preproduction. Provides basic modeling skills. Prerequisites: None.

THP263
Entertainment Industry Design I: 2D CAD
3 credit(s) 6 period(s) lecture + lab
Introduction to Computer Aided Drafting (CAD) for the Entertainment industry, including stage, screen and television venues, using CAD software. Includes basic set-ups, formats, two-dimensional drawing and editing commands, dimensions, text, and plotting typical to entertainment industries. Prerequisites: None.

THP264
Entertainment Industry Design II: 3D CAD
3 credit(s) 6 period(s) lecture + lab
Introduction to construction, manipulating, and rendering three-dimensional (3D) objects and theatrical stage spaces using CAD software and post-production software. Prerequisites: THP263.

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THP265
Introduction to Stage Management
3 credit(s) 6 period(s) lecture + lab
The focus of this course is the role of the stage manager. Topics include all aspects of preparation and implementation of rehearsals and performances for the stage manager position. **Prerequisites:** None.

THP266
Production Careers in Technical Theatre
1 credit(s) 2 period(s) lecture + lab
Provides the continuing design, stage management and technical student with opportunities to explore the versatility of the job opportunities within the Tech Theatre industry. Emphasis on presenting the work and talent both in person and on paper. Development of a professional resume and vita. **Prerequisites:** None.

THP267
Painting Techniques for Film, TV and Theatre
3 credit(s) 4 period(s) lecture + lab
Theory and skills in scenic artistry. Techniques of painting two-dimensional and three-dimensional scenery, tools, and the use of color. **Prerequisites:** THP213.

THP269
Technical Theatre Portfolio Development
1 credit(s) 1 period(s) lab
The analysis and preparation of all elements of a Technical Theatre/Design Portfolio including the use of digital portfolios and application to specific disciplines. Practice with portfolio presentation and maintaining and updating portfolio materials. **Prerequisites:** None.

THP/COM271
Voice and Diction
3 credit(s) 3 period(s) lecture
Exercises and techniques to free the voice and improve projection, resonance, and articulation. Covers international phonetic alphabet and standard stage speech. **Prerequisites:** None.

THP292AC
Summer Conservatory: Script Analysis (TECH)
1 credit(s) 1 period(s) lecture
Theory and practice in analysis of dramatic literature as preparation for technical production applications. May be repeated for a total of three (3) credit hours. **Prerequisites:** By interview only.

THP292AE
Summer Conservatory: Production (TECH)
4 credit(s) 5 period(s) lecture + lab
Practicum in various aspects of technical theatre production for public performance. May be repeated for a total of twelve (12) credit hours. **Prerequisites:** By interview only.

THP296WC
Cooperative Education
3 credit(s) 15 period(s) lab
Work-college experiences that involve the combined efforts of educators and employers to accomplish an outcome related to the career objectives of the students. **Prerequisites:** Completion of at least twelve (12) college credits, minimum 2.6 grade point average, and be able to obtain a position related to student’s academic or career goals (student’s present job may qualify); or permission of instructor. **Corequisites:** Must be concurrently enrolled in at least one class which is related to student’s major or career interest or with permission of the instructor.

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VPT – Video Production Technology

VPT/TCM104
Scriptwriting
3 credit(s) 3 period(s) lecture
Script writing process, including developing objectives, writing research agendas, designing content outlines, writing a treatment, writing a training script, marketing script, and dramatic training script. Dramatic motion picture screen play format, the dramatic curve, believable character creation and dialog and creation of the first ten pages of a screenplay. Prerequisites: None.

VPT/TCM114
Audio for Video and Media
3 credit(s) 5 period(s) lecture and lab
Audio in media production including Electronic News Gathering (ENG) and Electronic Field Production (EFP), studio and Sound Room for corporate, cable and broadcast applications. Microphones and audio recording equipment: audio production techniques using a Shot Gun Boom microphone while in the field; audio recording in the sound room; multi-track recording and layback; audio editing using a non-linear computer program: music libraries: sound effects: video tape editing in audio post-production. Prerequisites: None.

WED – Wellness Education

WED125
Reiki: Healing and Symbols
2 credit(s) 2 period(s) lecture + lab
Introduction to Reiki as a Japanese technique for stress reduction and relaxation that also promotes healing. Instruction in the Usui method of Reiki and its applications to personal health and everyday life. Prerequisites: None. Course Notes: WED125 may be repeated for a total of ten (10) credits.

WED151
Introduction to Alternative Medicine
3 credit(s) 3 period(s) lecture
Definition of health; exploration of mind-body-spirit connection in health; various therapeutic modalities; identification of strengths and limitations of alternative therapies. Also includes development of ability to critically review written material in the alternative therapy area. Prerequisites: None.

WED156
Humor and Play
1 credit(s) 1 period(s) lecture
Physiological, psychological, emotional, and intellectual effects of humor and play; suggestions for planning periods of play and incorporating it into one’s life. Prerequisites: None.

WED160
Ethics of Touch Massage
0.5 credit(s) 0.5 period(s) lecture
Basic ethical principles used in the practice of massage. Major emphasis on personal and professional boundaries, the role of dual relationships, effective communication, and special considerations in massage. Prerequisites: None.

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WED162  
Meditation and Wellness  
1 credit(s) 1 period(s) lecture  
Physiology of meditation and its effects on physical and mental health; scholastic abilities and interpersonal relationships; differentiation between meditation and other relaxation techniques. Prerequisites: None.

WED165  
Overview of Massage Therapy  
2 credit(s) 2 period(s) lecture  
History of massage; overview of bodywork systems; benefits and indications of massage; legal requirements for practice in Arizona. Prerequisites: None.

WED170  
Principles of Homeopathy  
1 credit(s) 1 period(s) lecture  
Origins of homeopathy; key concepts; perceptions of disease; schools of homeopathy; scientific studies; preparation of remedies; case taking. Prerequisites: None.

WED172  
Overview of Herbal Remedies  
1 credit(s) 1 period(s) lecture  
History and evolution of herbs for healing applications. Preparation, usage, and effects of certain herbs used for healing purposes. Basic literature review skills in the area of herbal medicine. Prerequisites: None.

WED176  
Flower Essences  
1 credit(s) 1 period(s) lecture  
Healing properties of Bach flower remedies; Bach’s development of remedies and his philosophy of healing; use and preparation of a variety of flower essences. Prerequisites: None.

WED182  
Health Conditions and Popular Herbs  
2 credit(s) 2 period(s) lecture  
In-depth look at some of today’s most popular herbs and their relationship to specific health conditions. Emphasis on research skills in relation to popular herbs. Includes the effects, uses, and application strategies of herbs. Prerequisites: None. WED172 suggested but not required.

WED183  
Introduction to Ayurvedic Principles  
2 credit(s) 2 period(s) lecture  
Introduction to Ayurveda: “the science of life”; a complete system of balancing the body, mind and spirit, originating from ancient India. Introduction to foundational Ayurvedic principles, health philosophy and self assessment of basic constitution. Application of basic health and self care practices such as food selection and preparation, exercise and movement, renewal and restoration activities, environmental influences to promote health and well-being. Prerequisites: None. Course Notes: WED183 may be repeated for a total of six (6) credits.

WED204  
Establishing a Massage Practice  
3 credit(s) 3 period(s) lecture  
Explore career options in therapeutic massage, including state licensing requirements, and determine how to lay the groundwork for a successful massage practice. Prerequisites: None.

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WED210
Sports Massage
2 credit(s) 3 period(s) lecture + lab
Purpose, benefits, and contraindications of sports massage; principles of sports physiology; massage techniques, applications, and procedures; treatment of injuries. Prerequisites: WED165 and WED230, or permission of Program Director.

WED215
Self-Care for Health Care Professionals
2 credit(s) 5 period(s) lecture + lab
Emphasis on mind-body methods for personal wellness through integration of physical, emotional, social, and spiritual dimensions of being. Development of a personal practice to achieve and sustain a balanced program to support personal health and well being. Prerequisites: None.

WED218
Aromatherapy
1 credit(s) 1 period(s) lecture
Physiology of aromatherapy; methods of use; preparation of oils; uses in sports, beauty care, massage, child care, healthcare, at work, and in the home. Prerequisites: None.

WED230
Therapeutic Massage Practices I
6 credit(s) 9 period(s) lecture + lab
Principles of professionalism, ethics, and legalities. Includes use of terminology related to massage therapy. Applications, indications, and contraindications of the nine strokes of Swedish massage. Study of the human osseous and muscular structure. Emphasis on normal movement patterns, origins, insertions, and functions of the muscular system. Prerequisites: Acceptance into the Therapeutic Massage program or permission of Program Director.

WED231
Therapeutic Massage Practices II
6 credit(s) 9 period(s) lecture + lab
Refined application of the nine strokes of Swedish massage and contraindications to avoid. Application of advanced principles and techniques of trigger point therapy, muscle energy technique, stretching, hydrotherapy protocols, hot and cold applications, reflexology, and corporate massage. Study of the human osseous and muscular structure. Emphasis on normal movement patterns and the origin, insertion, and function of the muscular system. Prerequisites: WED230.

WED232
Therapeutic Massage Practices III
6 credit(s) 10 period(s) lecture + lab
Refinement and integration of technical skills, psychosocial competencies, and role identity. Exploration of techniques to assess and facilitate range of motion and function; purpose, benefits, indications, and contraindications of therapeutic massage for specific neuro-musculoskeletal disorders/injury and special populations. Application of massage techniques with therapist’s pre- and post-client evaluations of the client. Adaptation of massage techniques for special populations. Prerequisites: WED231. Corequisite: WED250, or permission of Program Director.

WED250
Clinical Practicum
3 credit(s) 6 period(s) lab
Application of fundamental massage techniques. Prerequisites: WED231. Corequisites: WED232, and permission of Program Director.

WED262
Acupressure/Shiatsu I
2 credit(s) 3 period(s) lecture + lab
Overview of the principles of Traditional Chinese Medicine and the Meridian System; history, purpose, benefits, indications, and contraindications of Acupressure/Shiatsu. Therapeutic techniques and applications of Acupressure/Shiatsu; pre and post evaluations of intervention procedures. Prerequisites: None.

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WED264
Acupressure/Shiatsu II
2 credit(s) 3 period(s) lecture + lab
Therapeutic techniques and applications for Arma massage used to disperse heat and stagnant “Ki”; hands-on techniques to balance Kyo and Jitsu energy; meridian rebalancing stretches and visualizations for release of acute/chronic muscle tension. Prerequisites: WED262, or permission of instructor.

WED297AA-AC
Special Topics: Therapeutic Massage
1-3 credit(s) 1-3 period(s) lecture + lab
Explores a special topic related to therapeutic massage. Topics vary and include concepts relevant to those pursuing careers in therapeutic massage. Prerequisites: None.

WST – Women’s Studies

WST100
Introduction to Women’s and Gender Studies
3 credit(s) 3 period(s) lecture
Introduction to critical issues in women’s studies. Prerequisites: None.

WST105
Women of Color in America
3 credit(s) 3 period(s) lecture
Analysis and discussion of critical issues for women of color in America. Prerequisites: None.

WST110
Women and Gender:
A Feminist Psychology
3 credit(s) 3 period(s) lecture
A discussion of the psychology of gender and sex from a feminist perspective. Prerequisites: None.

WST120
Gender, Class, and Race
3 credit(s) 3 period(s) lecture
A feminist discussion of gender, class and race as basic and central social categories that determine how we see ourselves and others and how they circumscribe our opportunities and privileges in American society. Prerequisites: None.

WST/AJS128
Law and Violence Against Women
3 credit(s) 3 period(s) lecture
Covers cases and materials on systems of oppression particularly as related to women in our society. Areas covered include battering, sexual harassment, sexual assault, prostitution, and pornography as exemplified in present-day society. Designed to give students the ability to identify problems of violence against women and participate in current societal discourse on various ways to resolve them. Prerequisites: None.

WST160
Women and the Early American Experience
3 credit(s) 3 period(s) lecture
Introduction to American women's history, from the colonial period to suffrage in 1920, based on a feminist perspective. Prerequisites: None.

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WST161
American Women Since 1920
3 credit(s) 3 period(s) lecture
Continuation of the history of women in America from 1920 to the present, based on a feminist perspective. Includes discussion of the roles and status of immigrant and ethnic minority women. Prerequisites: None.

WST206
La Mujer
3 credit(s) 3 period(s) lecture
Analysis and discussion of critical issues for Latinas in America today. Prerequisites: None.

WST/AFR207
Black Women
3 credit(s) 3 period(s) lecture
Analysis and discussion of critical issues for Black women in America today. Prerequisites: None.

WST/HUM209
Women and Films
3 credit(s) 3 period(s) lecture
Analysis of images of women in films from both historical and contemporary perspectives. Prerequisites: None.

WST/AIS/ENH261
Native Women's Literature: The Americas
3 credit(s) 3 period(s) lecture
Explores contemporary native women's (indigenous to the Americas) literature. Selected literature (oral tradition, poetry, fiction, nonfiction, and drama) focuses on themes relevant to native women. Examines the trends and movements within American Indian and women's literary history. Prerequisites: ENG101.

WST/ENH285
Contemporary Women Writers
3 credit(s) 3 period(s) lecture
Explores twentieth century literature (short stories, essays, plays, and poetry) written by women and about women. Focus on themes relevant to women's lives regardless of age, creed, or ethnic background. Prerequisites: None.

WST/REL290
Women and Religion
3 credit(s) 3 period(s) lecture
The role of women in several organized religions and/or religious sects, including a study of myth and symbols as they are used to establish, maintain, and enforce sex-roles within specific religions. Prerequisites: None.

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