# COURSE DESCRIPTIONS

Proposed Future Student Services Center

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## AAA – Advancing Academic Achievement

#### AAA/CPD 150

Strategies for College Success 3 credits 3 periods 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 1 period 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 1 period lecture

Emphasis on increasing student success through the use of study strategies including materials organization, notetaking, reading, test-taking, memory and critical and creative thinking. **Prerequisites:** None.

#### AAA/CPD150AC

#### Educational & Career Planning 1 credit 1 period lecture

Emphasis on increasing student success through educational and career planning. **Prerequisites:** None.

## ACC – Accounting

#### ACC111

#### Accounting Principles I

**3 credits 3 periods lecture** Fundamental theory of accounting principles and procedures. **Prerequisites:** None.

#### ACC115

#### Computerized Accounting 2 credits 3 periods 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

2 credits 3 periods lecture + lab

Preparation of and practical experience in preparing returns. **Prerequisites:** None.

#### ACC219

#### Intermediate Accounting I 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

#### ACC240

#### Uses of Accounting Information II 3 credits 3 periods 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 credits 1-3 periods 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 credits 1-3 periods 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. Professionaltype 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 credits 5 periods 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 credits 4 periods lecture + lab** Printing methods, skill development in planning and layout, composition methods, proofing and correction, color process, image carrier preparation. **Prerequisites:** None.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/ curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/ curric/cs.php

#### ADA180

Designer's Tools (*Modules*) 1 credit 2 periods 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.

#### ADA180AA

Designer's Tools: Ready, Set, Go! ADA180AB Designer's Tools: Page Maker ADA180AC Designer's Tools: Quark Express ADA180AD Designer's Tools: Adobe Illustrator ADA180AE Designer's Tools: Adobe Photoshop ADA180AF Designer's Tools: Paint Software ADA180AG Designer's Tools: Animation Works ADA180AH Designer's Tools: Aldus Freehand

#### AES – Aerospace Studies

#### **AES101**

The Air Force Today I

2 credits 2 periods 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 credits 2 periods 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:** AES101 or ASU Department of Aerospace Studies approval.

### AES201

#### Evolution of USAF Air & Space Power I 2 credits 2 periods lecture & lab

Further preparation of AFROTC candidate. Topics include: Air Force heritage and leaders, communication skills, ethics, leadership, quality Air Force, and values. **Prerequisites:** AES103 or ASU Department of Aerospace Studies approval.

#### **AES203**

Evolution/USAF Air & Space Power II 2 credits 2 periods lecture & lab

Topics include: The Air Force mission and organization, customs and courtesies, officer opportunities, officership, and professionalism. **Prerequisites:** AES201 or ASU Department of Aerospace Studies approval.

## AFR – African American Studies

#### **AFR110**

Introduction to African-American Studies

#### 3 credits 3 periods 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.

#### **AFR203**

## African-American History: The Slavery Experience

3 credits 3 periods 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 credits 3 periods 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.

## AIS – American Indian Studies

#### **AIS101**

#### Survey of American Indian Issues 3 credits 3 periods 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 credits 3 periods 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.

### AIS/SOC112 American Indian Policy

## 3 credits 3 periods 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 credits 3 periods 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.



**Course Descriptions** 

#### AIS/SOC160 American Indian Law 3 credits 3 periods 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 credits 3 periods 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.

#### AIS/MGT203

#### Fundamentals of Economic Development for Indigenous Nations 3 credits 3 periods lecture

Provides a practical understanding of the economic development process. Examines ways in which development can be initiated and financed. Focuses on how budget systems can be used as management tools. Reviews fundamentals of proposal writing and budget management for grants. **Prerequisites:** ACC230 or permission of instructor.

#### AIS213 /REL203

#### American Indian Religions 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

#### AIS298AA-AC Special Projects

#### 1-3 credits 1-3 periods 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. Professionaltype 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

#### AJS101

#### Introduction to Criminal Justice 3 credits 3 periods lecture

An examination of the organization and jurisdiction of local, state and federal law enforcement, judicial and corrections systems; their history and philosophy; career opportunities and qualifying requirements, terminology and constitutional limitations of the system. Required in AJS curriculum. **Prerequisites:** None.

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#### AJS107

## Patrol Procedures

## 3 credits 3 periods 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.

#### AJS109

#### Substantive Criminal Law 3 credits 3 periods 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.

#### AJS110

#### Law and Legal Review I 3 credits 3 periods 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.

#### AJS123

## Ethics & the Administration of Justice 3 credits 3 periods 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.

#### AJS124

## Correctional Institutions

3 credits 3 periods 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.

#### AJS128

#### Law and Violence Against Women 3 credits 3 periods 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 presentday 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.

#### AJS131

#### Police Management Techniques I 3 credits 3 periods lecture

Police supervisory techniques for planning, organization coordination, reporting, budgeting and handling related personnel problems. **Prerequisites:** None.

#### AJS150

## Defensive Tactics

#### 1 credit 1 period lecture

Skills in the protection against persons armed with dangerous and deadly weapons, demonstration and drill in a limited number of holds and comealongs, and restraint of prisoners and the mentally ill. May be repeated twice for credit. **Prerequisites:** None.

#### AJS200

### Current Issues in Criminal Justice 3 credits 3 periods lecture

Examines current issues, techniques, and trends in the Criminal Justice System. **Prerequisites:** None.

#### AJS201

#### Rules of Evidence 3 credits 3 periods 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 AJS curriculum. **Prerequisites:** None.

#### AJS205

#### Criminal Justice Report Writing 3 credits 3 periods 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.

#### AJS210

#### Constitutional Law 3 credits 3 periods 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 AJS curriculum. **Prerequisites:** None.

#### AJS212

#### Juvenile Justice Procedures 3 credits 3 periods lecture

Examines the history and development of juvenile justice theories, procedures, and institutions. **Prerequisites:** None.

#### AJS213

#### Evidence Technology/Fingerprints 3 credits 3 periods 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.

#### AJS214

## Evidence Technology/Photography 3 credits 3 periods 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.

#### AJS215

#### Criminalistics: Physical Evidence 3 credits 3 periods 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.

#### AJS216

#### Criminalistics: Biological Evidence 3 credits 3 periods 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.

#### AJS225

## Criminology

#### 3 credits 3 periods 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 AJS curriculum. Prerequisites: None.

#### AJS230

## The Police Function

### 3 credits 3 periods 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.

#### AJS240

The Correction Function

#### 3 credits 3 periods lecture

Examines the history and development of correctional theories and institutions. **Prerequisites:** None.

#### AJS241

#### Police Photography 3 credits 3 periods 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.

#### AJS260

## Procedural Criminal Law

3 credits 3 periods 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 credits 3 periods 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 1 period 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.

#### AJS273 Methods of Crisis Intervention 1 credit 1 period lecture

Use of appropriate conflict resolution techniques by police and correctional officers, including use of assertive communication, force, safety procedures, and referrals. **Prerequisites:** None.

#### AJS275 Criminal Investigation I 3 credits 3 periods 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 credits 3 periods 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.

#### AJS289AJ

## Street Gangs I

**1 credit 1 period 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 Criminal Justice Seminars -

Seminar topics presented by the Cultural and Applied Social Sciences Department are selected from a variety of subjects designed to meet the needs and interests of persons desiring inservice education and training. AJS290 may be repeated for credit provided it is not a repeat of the same topic. Seminars may not transfer to other colleges and universities.

#### AJS290AU

#### Child Abuse Investigation 1 credit 1 period lecture

Definition and investigation of the causes and effects of child abuse. **Prerequisites:** None.

#### AJS290BL

## White Collar Crimes 1 credit 1 period lecture

Business-related criminal activities, including computer fraud, pyramid schemes and false and misleading advertising and security schemes. Prerequisites: None.

#### AJS290BN

Courtroom Testimony Seminar 1 credit 1 period lecture

Courtroom demeanor and protocol. Role and primary functions of witness and legal counsels. **Prerequisites:** None.

#### AJS290BO

#### Alcohol Abuse Seminar 1 credit 1 period lecture

Physiological and psychological effects of alcohol and symptoms of alcohol abuse. Emphasis on the detection and treatment of the alcoholic. **Prerequisites:** None.

#### AJS290BU

#### Family Violence

#### 1 credit 1 period lecture

Family violence issues as they relate to the criminal justice response. **Prerequisites:** None.

### AJS290BV

## Victim Assistance

## 1 credit 1 period 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 credits 5 periods lecture + lab

Introduction to the basic alphabet, grammar, pronunciation and vocabulary of the Arabic language. Listening, speaking, reading and writing skills. **Prerequisites:** None.

## **ARH – Art Humanities**

#### ARH100

## Introduction to Art

#### 3 credits 3 periods 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

Prehistoric Through Gothic Art 3 credits 3 periods lecture History of art from prehistoric through

medieval period. **Prerequisites:** None.

#### ARH102

#### Renaissance Through Contemporary Art

#### 3 credits 3 periods lecture

History of art from around the world from the Renaissance through contemporary period. **Prerequisites:** None.

#### **ARH109**

#### History of American Art

#### 3 credits 3 periods lecture

Development and variety of American art. Presentation of architecture, sculpture, painting and decorative objects. **Prerequisites:** None.

#### ARH112

History of Modern Art

#### 3 credits 3 periods lecture

Development and significant aspects of modern art, including comparisons of relationships in expressionism, abstractions, fantasy, and art since midcentury. **Prerequisites:** None.

#### **ARH115**

#### History of Photography 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

#### ARH201

### Art of Asia

## 3 credits 3 periods lecture

Introduction to the origins and historic development of art in Asia, with emphasis on China, Japan, and India. **Prerequisites:** None.

#### ARH203

#### Art of Ancient Egypt

**3 credits 3 periods lecture** The art and culture of ancient Egypt from prehistoric through the Greco-Roman period. **Prerequisites:** None.

#### **ARH216**

#### Pre-Columbian Art History 3 credits 3 periods lecture

Art of the Americas prior to European contact, focusing on Mesoamerica and the Central Andean region and their respective adjoining areas, with some attention to the U.S. Southwest and Eastern Woodlands Mound Building cultures. **Prerequisites:** None.

#### **ARH217**

### Mexican Art History

**3 credits 3 periods lecture** Art of Mexico and related cultures, from the prehistoric to the contemporary period. **Prerequisites:** None.

## ART - Studio Art

#### **ART100**

Introduction to Computer Graphic Art 1 credit 2 periods lecture + lab Conceptualization, visualization, and production of art using the computer. Prerequisites: None.

#### ART111

#### Drawing I

#### 3 credits 6 periods lecture + lab

Fundamental principles of drawing. Emphasis on composition and facility in objective and expressive representation, using variety of drawing media. **Prerequisites:** None.

#### ART/ADA112

#### Two-Dimensional Design

**3 credits 6 periods lecture + lab** Study of fundamental elements and principles of two-dimensional design. **Prerequisites:** None.

#### ART113

#### Color

#### 3 credits 6 periods lecture + lab

Investigation seeking visual solutions to a variety of problems concerning color in two and three dimensions and modes of color appearances, including light and effects in design and theory of design. **Prerequisites:** ART112.

#### ART/ADA115

#### Three-Dimensional Design

**3 credits 6 periods lecture + lab** Fundamental principles of threedimensional design. **Prerequisites:** ART112.

#### ART116

#### Life Drawing I

#### 3 credits 6 periods 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 credits 6 periods 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 credits 6 periods lecture + lab

Emphasis on composition and exploration of drawing media. **Prerequisites:** ART111.

#### ART151

## Sculpture I

**3 credits 6 periods 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 credits 6 periods lecture + lab Continuation of ART151 with emphasis

on control of sculptural media. **Prerequisites:** ART151.

## ART161

### Ceramics I

### 3 credits 6 periods lecture + lab

Introduction to ceramic materials and techniques of hand construction, decorating, glazing and throwing on potters' wheel. **Prerequisites:** None.

## ART162

#### Ceramics II

## 3 credits 6 periods lecture + lab

Major emphasis on wheel throwing, glaze making and decorating techniques. **Prerequisites:** ART161.

#### ART165

Watercolor Painting I 3 credits 6 periods lecture + lab Transparent and Gouache watercolor painting. **Prerequisites:** ART111 and ART112 or permission of instructor.

#### ART166

#### Watercolor Painting II

**3 credits 6 periods lecture + lab** Painting in water soluble media. Emphasis on individual techniques and design. **Prerequisites:** ART165.

#### ART167

#### **Painting I**

#### 3 credits 6 periods 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 credits 6 periods lecture + lab

Continued refinement of painting skills and investigation of new possibilities in painting. **Prerequisites:** ART167 or permission of instructor.

#### ART/ADA 169

#### Two-Dimensional Computer Design 3 credits 6 periods lecture + lab

Generation of electronic twodimensional 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 credits 6 periods lecture + lab

Artistic manipulation of computer images. Emphasis on color and threedimensional 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 credits 6 periods 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 credits 6 periods 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 credits 6 periods 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.

#### ART179

#### Electronic Presentation Design 3 credits 6 periods 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.

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#### ART180 -- Designer's Tools Modules 1 credit 2 periods 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.

#### ART180AB

**Designer's Tools: Page Maker** ART180AC **Designer's Tools: QuarkXPress** ART180AD Designer's Tools: Adobe Illustrator ART180AE Designer's Tools: Adobe Photoshop ART180AF **Designer's Tools: Paint Software** ART180AH **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 Premier** ART180AL

Designer's Tools: Character Studio

#### ART181

Graphic Design I

### 3 credits 6 periods 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.

#### ART182

## Graphic Design II

3 credits 6 periods 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 credits 6 periods 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/ Corequisites:** ART100 or permission of instructor.

#### ART/ADA/MMT184 Computer Animation 3 credits 6 periods 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 credits 6 periods lecture + lab

Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements that make computer modelscurves, surfaces, nurbs, and polygons. 3-D translation, shading, materials, and rendering. **Prerequisites:** ART/MMT184, or ART/MMT184AC, or permission of the instructor.

## ART/MMT185AA

#### **3-D** Modeling for Animation I 1 credit 2 periods lecture + lab

Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements of compounding objects and Boolean operations. **Prerequisites:** ART/MMT184, or permission of instructor.

#### ART/MMT185AB

#### 3-D Modeling for Animation II 1 credit 2 periods lecture + lab

Basic concepts of 3-D modeling. Creating shapes using line, polygonal object construction, and lofting objects. **Prerequisites:** ART/MMT185AA, or permission of instructor.

#### ART/MMT185AC

#### 3-D Modeling for Animation III 1 credit 2 periods lecture + lab

Basic concepts of 3-D modeling and the use of lights, cameras, materials, and other modifiers. **Prerequisites:** ART/MMT185AB, or permission of instructor.

### ART/MMT190 Art of Web Site Design

**3 credits 6 periods lecture + lab** Print vocabulary, relationships, and typographic style for HTML and World Wide Web publication. Discussion of color, proportion, and design emphasis. Producing Web sites using HyperText Markup Language (HTML), digital text, and graphics to produce artistic form and content for the Web. **Prerequisites:** ART180AB or ART180AC or ART180AE or permission of instructor.

#### ART/MMT190AA Art of Website Design I 1 credit 2 periods lecture + lab

Print vocabulary, relationships, and typographic style for HTML and World Wide Web publication. Designing with text from visual, technical, and motion aspects. **Prerequisites:** ART180AB or ART180AC or ART180AE or permission of instructor.

#### ART/MMT190AB Art of Website Design II 1 credit 2 periods lecture + lab

Producing Web site pages, using design and HyperText digital text and graphics. **Prerequisites:** ART190AA or permission of instructor.

#### ART/MMT190AC Art of Website Design III 1 credit 2 periods lecture + lab

Producing Web sites, using artistic form and content. Interactive multimedia applications for on-line design. **Prerequisites:** ART190AB or permission of instructor.

#### ART/MMT191

#### Storyboarding and Layout

2 credits 4 periods lecture + lab Introduction to storyboarding including film storytelling and scene presentation. **Prerequisites:** ART111 or ART/MMT187 or ART/MMT188.

#### ART/MMT192AA

#### 3-D Modeling for Digital Media I 1 credit 2 periods lecture + lab

Development of 3-D models for multimedia productions. Inverse kinematics, use of fractals and materials to render finished models. **Prerequisites:** ART/MMT184 or permission of instructor.

#### ART/MMT192AB

#### 3-D Modeling for Digital Media II 1 credit 2 periods lecture + lab

Development of 3-D models for multimedia productions. Use of morphing and particle systems for finished models. **Prerequisites:** ART/MMT192AA or permission of instructor.

#### ART/MMT192AC

#### 3-D Modeling for Digital Media III 1 credit 2 periods lecture + lab

Development of 3-D models using advanced modeling and animation techniques. **Prerequisites:** ART/MMT192AB or permission of instructor.

#### ART255AA

#### Self Promotion

#### 1 credit 1 period lecture

Career goals, presentation of artist, communication skills, keeping files and records, developing self-promotional materials. **Prerequisites:** None.

#### ART255AB

#### The Portfolio

#### 1 credit 1 period lecture

Choosing the right pieces to include, presenting art work, developing the portfolio. **Prerequisites:** ART255AA or permission of instructor.

#### **ART259**

#### Monoprinting

#### 3 credits 6 periods 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 credits 6 periods lecture + lab

Intermediate microcomputer-based photographic imaging techniques. Refinement of aesthetic awareness and personal expression. **Prerequisites:** ART177 or (ART177AA and ART177AB).

#### **ART275**

#### Lost Wax Casting I

#### 3 credits 6 periods 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 credits 6 periods 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 credits 6 periods 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/ADA/MMT284

#### Intermedia Animation

#### 3 credits 6 periods lecture + lab

Elements of electronic animation with interactive text graphics, photography, sound, film, and video construction. **Prerequisites:** ADA/ART/MMT184 or permission of instructor.

#### ART/ADA285

#### Multipresentation Graphics 3 credits 6 periods 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.

#### ART/ADA289

#### Computer Illustration 3 credits 6 periods 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/Corequisites:** ART100 or permission of instructor.

## ART290 Studio Art

3 credits 6 periods lecture + lab

Studio course for art majors allowing continuation in a subject field. **Prerequisites:** All 100 and 200-level courses in subject matter area, or permission of instructor.

#### ART291 Digital Prepress 3 credits 6 periods 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 periods 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 periods 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 periods 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. Professionaltype 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 periods lecture + lab

Basic black and white photographic principles and techniques. Camera functions and controls. Darkroom experience in film processing and printmaking. Camera required. **Prerequisites:** None.

#### ART132

### Photography II

#### 3 credits 6 periods lecture + lab

Advanced camera and darkroom techniques. Aesthetic awareness with personal expression. **Prerequisites:** ART131, or permission of instructor.

#### ART133

#### Photography III

#### 3 credits 6 periods 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.

#### **ART137**

#### Alternative Photographic Processes 3 credits 6 periods 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 credits 6 periods lecture + lab

Basic techniques of lighting, camera work, and reproduction of commercial photography. Cooperation with commercial art community. **Prerequisites:** None.

#### ART139

#### **Commercial Photography II 3 credits 6 periods lecture + lab** Continuation of ART138. Advanced techniques with portfolio organization and presentation. **Prerequisites:** ART138.

#### **ART140**

#### Portrait Photography 2 credits 4 periods 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 credits 6 periods 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.

#### ART/ADA177

#### Computer-Photographic Imaging 3 credits 6 periods 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 credits 6 periods lecture + lab** Basic principles of color theory, camera and darkroom techniques, using positive materials. **Prerequisites:** ART131 or permission of instructor.

#### **ART235**

#### Color Photography II

**3 credits 6 periods lecture + lab** Basic theories and techniques of color negative materials. **Prerequisites:** ART234 or permission of instructor.

#### ART295DA, DB, & DC

#### Art Workshop/Seminar: Photography 1, 2, & 3 credits 2, 4, & 6 periods 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

## Intro to Cultural and Social Anthropology

#### 3 credits 3 periods 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.

#### ASB202

## Ethnic Relations in the United States 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/ curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/ curric/cs.php

#### ASB222

#### Buried Cities and Lost Tribes: Old World

### 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Comparative study of the cultures, including the histories and present status, of Indians of the Southwest. **Prerequisites:** None.

#### ASM104

#### Bones, Stones, and Human Evolution 4 credits 5 periods 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.

## AST- Astronomy

#### AST101

## Survey of Astronomy

**3 credits 3 periods 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 3 periods 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 Astronomy I 3 credits 3 periods lecture

Introduction to astronomy for the nonscience major. History of astronomy, properties of light, instruments, the solar system and nearby stars. **Prerequisites:** MAT092 or equivalent.

#### AST112

#### Introduction to Astronomy II 3 credits 3 periods lecture

Introduction to astronomy for the nonscience major. Structure and evolution of stars; star clusters; galaxies; cosmology. **Prerequisites:** MAT092 or equivalent.

#### AST113

#### Astronomy I Laboratory

1 credit 3 periods lab Astronomical observations and exercises to supplement AST111. Prerequisites or Corequisites: AST111.

#### AST114

## Astronomy II Laboratory

#### 1 credit 3 periods lab

Astronomical observations and exercises to supplement AST112. **Prerequisites** or **Corequisites:** AST112.

## **BIO – Biology**

#### **BIO101**

#### General Biology (Non-Majors): Selected Topics

4 credits 6 periods lecture & lab Selected biological topics, including methods used by biologists to make discoveries and evaluate scientific data. Field trips may be required at students' expense. Prerequisites: None.

#### **BIO105**

#### Environmental Biology 4 credits 6 periods 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 credits 6 periods 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 credits 6 periods 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 3 credits 3 periods lecture

Study of the common plants and animals of the Southwest including their distribution, adaptation, behavior, and ecology. **Prerequisites:** None.

#### BIO110

## Laboratory for Natural History of the Southwest

#### 1 credits 3 periods lab

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. Weekend field trips required at students' expense. **Prerequisites or Corequisites:** BIO109 or permission of instructor.

#### BIO145

#### Marine Biology

#### 4 credits 6 periods 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 1 period 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 credits 3.5-28 periods 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.

#### **BIO156**

#### Introductory Biology for Allied Health 4 credits 6 periods 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 credits 6 periods 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.

#### **BIO162**

## Microbiology Concepts for Allied Health

#### 2 credits 3 periods lecture & lab

Types of microorganisms. Principles of growth and reproduction for specific types of microorganisms. Chain of disease transmission and defense mechanisms. Use of compound microscope. Safe handling and culturing of specific microbes. Methods of sterilization and use of disinfectants and chemotherapeutic agents. **Prerequisites:** None.

#### **BIO181**

#### General Biology (Majors) I 4 credits 6 periods lecture & lab

Principles of structure and function of living things at molecular, cellular, and organismic levels of organization. Field trips may be required at students' expense. **Prerequisites:** None. One year of high school chemistry or one semester of college-level chemistry is strongly recommended.

#### **BIO182**

#### General Biology (Majors) II 4 credits 6 periods lecture & lab

Additional principles of structure and function of living things at molecular, cellular, and organismic and higher levels of organization. Field trips may be required at students' expense. **Prerequisites:** A grade of "C" or better in BIO181.

#### **BIO201**

#### Human Anatomy and Physiology I 4 credits 6 periods 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:** A grade of "C" or better in BIO156, or BIO181.

#### **BIO202**

#### Human Anatomy and Physiology II 4 credits 6 periods 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 credits 6 periods lecture & lab

Study of microorganisms and their relationship to health, ecology, and related fields. **Prerequisites:** A grade of "C" or better in BIO156, or BIO181.

#### BIO214 Biotechnology Internship 4 credits 4 periods 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.

#### BIO215

#### Biotechnology Internship 3 credits 3 periods lecture

Internship experience in a biotechnology laboratory. Requires 240 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 and (BIO212AA or BIO212BA). **Course Note:** May be taken repeated for a total of six (6) credits.

#### **BIO219**

#### Geographic Information Systems and Global Positioning Systems in Environmental Investigations 4 credits 6 periods lecture & lab

Hands-on experience using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) in environmental investigations. Practical integration of biological data collected with GPS into real-world environmental applications. **Prerequisites:** None. **Course Note:** May receive credit for only one of the following: BIO219 or GPH219.

#### **BIO247**

#### Applied Biosciences: Biotechnology 4 credits 6 periods lecture & lab

Applies concepts of molecular and cellular biology of bacteria, animals, and plants to real-world problems. **Prerequisites:** A grade of "C" or better in BIO181. One semester of college-level chemistry or equivalent recommended.

#### BIO298AA, AB, AC Special Projects 1-3 credits 1-3 periods 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. Professionaltype 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 & Construction Technology

#### **BLT120**

## Techniques of Building Inspection 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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:** MAT182 or MAT187.

#### **BLT128**

#### Mechanical Codes 3 credits 3 periods lecture

Code requirements and construction practices. Topics include duct work, conductors and fuel supply, insulation, and controls. **Prerequisites:** None.

#### BLT129

#### Materials of Construction 3 credits 3 periods lecture

Fundamental characteristics of modern construction materials and the effective use of these materials in construction. **Prerequisites:** None.

#### **BLT130**

#### Applied Building Codes 4 credits 4 periods lecture

Building and zoning code procedures and enforcement. Construction design for solving structural problems. Building code requirements for life safety. Application of building codes to single family residences. **Prerequisites:** None.

#### **BLT131**

#### Applied Electric Codes 4 credits 4 periods 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 credits 4 periods 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 credits 3 periods 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.

## BPC – Business – Personal Computers

#### **BPC/BTO005**

## Brief Introduction to Computers

**0.25 credit 0.25 period lecture** Introductory course in fundamentals of computers, including hardware components, operating system characteristics, and basic software applications. **Prerequisites:** None.

#### BPC101AA

#### Introduction to Microcomputers I: IBM 1 credit 2 periods lecture

Microcomputer software applications for the IBM personal computer, including electronic spreadsheet and word processing, keyboarding review, and a desktop environment. **Prerequisites:** None.

#### BPC101BA

#### Introduction to Microcomputers II: IBM 1 credit 1 period lecture

Microcomputer software applications for the IBM personal computer, including database management, computer graphics, electronic spreadsheet, and word processing, and operating system commands. **Prerequisites:** BPC101AA.

#### BPC101CA

## Introduction to Microcomputers III: IBM

#### 1 credit 1 period lecture

Individualized advanced applications of software selected to solve specific problems on the IBM. **Prerequisites:** BPC101BA or permission of instructor.

#### BPC102AD

#### Using Windows: Level I

**0.5 credit 0.5 period lecture** Basic commands and methods associated with the Windows operating system. **Prerequisites:** None.

#### BPC102BD

## Using Windows: Level II

**0.5 credit 0.5 period lecture** Advanced commands and methods of the Windows operating system. **Prerequisites:** BPC102AD or permission of instructor.

### BPC104AD

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

#### BPC104BD

#### Using Excel: Level II 0.5 credit 0.5 period lecture

Use of Excel to enhance worksheets to include graphing and formatting data, using complex formula and function expressions to build and analyze data, and special print options to output worksheets and graphs. **Prerequisites:** BPC104AD or permission of instructor.

## BPC104CD

#### Using Excel: Level III 0.5 credit 0.5 period lecture

Use of Excel to produce worksheets macros utilizing for template development and automation of repetitious tasks, and worksheet methods for the storage and management of data. Prerequisites: BPC104BD or permission of instructor.

#### BPC107AH

#### Using Access: Level I 0.5 credit 0.5 period lecture

Use of Access to create, edit and selectively report data. **Prerequisites:** None.

#### BPC107BH

## Using Access: Level II

0.5 credit 0.5 period lecture

Use of Access commands to manipulate data files, generate data entry screens, generate complex reports with multiple level totals, transport data between a computer database program and other programs. Creation and use of command files. **Prerequisites:** BPC107AH or permission of instructor.

#### **BPC110**

#### Computer Usage and Applications 3 credits 4 periods 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 1.7 periods lecture + lab** Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. **Prerequisites:** None.

#### **BPC/OAS113**

#### Micro-Alphabetic Indexing 1 credit 1.7 periods 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.

#### BPC/CIS114AE Excel: Level I

#### 1 credit 2 period lecture + lab

Computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting and projections. **Prerequisites:** None.

## **BPC/CIS114BE**

Excel: Level II

#### 1 credit 2 periods 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 2 periods 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 2 periods 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 2 periods 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 2 periods 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 1 period 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 2 periods lecture + lab

Use of PowerPoint software to produce professional-quality presentation visuals. **Prerequisites:** None.

#### **BPC/CIS118BB**

## PowerPoint: Level II

1 credit 2 periods 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 1 period lecture + lab

Use of PowerPoint software for advanced desktop presentation techniques, including advanced animation and sound sequences. **Prerequisites:** BPC/CIS118BB.

#### **BPC/CIS118DB**

#### Desktop Presentation: PowerPoint 3 credits 5 periods lecture + lab

Use of PowerPoint to produce professional-quality presentation visuals with animation and sound. **Prerequisites:** None.

#### **BPC/OAS119**

#### Basic Data Entry Activities 1 credit 2 periods lab

Development of speed and accuracy of data entry skills. Includes vocabulary, keyboard drills, and data entry simulations. **Prerequisites:** (BPC111AA or OAS111AA or OAS101AA) or permission of instructor, OAS118 recommended but not required.

#### **BPC/CIS120AF**

#### Computer Graphics: Adobe Photoshop: Level I

1 credit 2 periods 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 2 periods 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**

#### MS-DOS Operating System 1 credit 2 periods lecture + lab

Use of the MS-DOS operating system: basic concepts, internal and external commands, subdirectories, and editor. **Prerequisites:** None.

#### **BPC/CIS121AE**

#### Windows Operating System: Level I 1 credit 2 periods 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.

#### **BPC/CIS122AE**

#### Windows Operating System: Level II 1 credit 2 periods 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.

#### BPC125

#### Microcomputer Set Up & Maintenance 1 credit 1 period 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 2 periods 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 2 periods 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 setup, text entry, graphic generation, text and graphic merging, and other computer-based functions.

Prerequisites: None.

#### BPC/OAS130

#### **Beginning Word Processing** 1 credit 2 periods lecture

Work with word processing software to create, revise and print documents. **Prerequisites:** Type 20 words per minute or permission of instructor.

#### BPC/OAS130DK Beginning Word 1 credit 2 periods 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 2 periods 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 1 period 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 1 period lecture + lab

Web site development using enhancement codes. Includes frames, style sheets and javascript as well as design principles and typography. BPC/CIS133BA.

#### BPC/CIS133DA

#### Internet/Web Development Level I 3 credits 4 periods 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.

#### BPC/OAS135DD

#### WordPerfect : Level I 2 credits 2 periods 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 credits 2 periods lecture

Using Word 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.

#### BPC138AA

## Windows Desktop Design & Publishing

**3 credits 4 periods 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+ Prep 3 credits 4 periods 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 and BPC121AB or permission of instructor.

#### BPC210

## Advanced Computer Usage & Applications

#### 3 credits 4 periods lecture + lab

Advanced application of software for business and personal computers including word processing, spreadsheet, database, and presentation. Includes integration of applications and Internet. **Prerequisites:** BPC110, or permission of instructor.

#### BPC225

#### Computer Configuration and Enhancement

## 1 credit 2 periods 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.

#### **BPC/HCE229**

## Automated Computer System for Medical Office Management

#### 1 credit 3 periods lecture + lab

Principles and procedures in using an office automated computerized system for entering patient information and tracking patient billing. Includes use of accounting cycle from originating data to closing ledger entries. **Prerequisites:** None. **Corequisite:** HCC130, HCC145, or equivalent, or permission of program director.

#### BPC/OAS235DD WordPerfect: Level II 2 credits 2 periods lecture

Using WordPerfect word processing software features such as math, columns, macros, styles, graphics, sort, outlines, and table of contents. **Prerequisites:** BPC/OAS135DD or permission of instructor.

#### BPC/OAS235DK

#### Word: Level II

#### 2 credits 2 periods 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

#### Microcomputer Maintenance II 3 credits 4 periods lecture + lab

Advanced technical aspects of maintaining and servicing microcomputers. Emphasis placed on installation, periodic maintenance, diagnosis, and/or problem resolution of power system, motherboard, memory, storage devices, and network interface cards. Extensive use of software diagnostic utility and tools. Prerequisites: BPC170 with grade of C or better, or permission of instructor.

## BTO – Business Technology for the Office

#### BTO/MGT148

**Office Ethics and Culture** 

2 credits 2 periods lecture Ethical issues and standards in the office; making ethical choices. Relationships and attitudes in the office. Office politics. **Prerequisites:** None.

## CCS – Chicana & Chicano Studies

#### CCS101

#### Chicana and Chicano Studies 3 credits 3 periods 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.

### CCS/ENH212

## The Mexican American Novel 3 credits 3 periods lecture

A study of the social, historical, and cultural backgrounds as well as the form and content of the Mexican American novel. **Prerequisites:** ENG101. ENH112 suggested but not required.

#### CCS282AA-AC

Volunteerism for Chicana and Chicano Studies: A Service Learning Experience 1-3 credit s 1-3 periods 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 periods 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. Professionaltype 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 credits 5 periods 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 credits 5 periods 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 credits 3 periods 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.

#### CET105

#### Highway Technology 3 credits 3 periods lecture

Economics of highway locations, rightsof-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 credits 3 periods 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 MAT182) or departmental and permission.

#### **CET171**

#### Construction Contracts 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 I 3 credits 3 periods 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.

#### **CET250**

## Public Land Survey System 3 credits 3 periods 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 credits 3 periods 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 & ECH – Early Childhood Education

#### CFS101AH

Art Activities for the Young Child 1 credit 1 period 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 1 period 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 1 period 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.

#### **CFS107**

## Men and Children: Strengthening the Bond

#### 1 credit 1 period lecture

Overview of the relationship between fathers or significant male figures and children from the role perspective of the involved, nurturing male. Strategies for assessing and organizing successful male involvement programs examined. **Prerequisites:** None.

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#### CFS109

#### Parent/Child Communication 1 credit 1 period 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 1 period 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.

#### **CFS116**

#### Discipline and Guidance 3 credits 3 periods lecture

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 1 period lecture

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 1 period lecture

Fundamental concepts of safe practices and procedures for the early childhood setting, with emphasis on playground equipment and outdoor activities, transportation practices, poisons, medication management, fire safety, and written documentation basics. **Prerequisites:** None.

#### CFS/PSY130 Demystifying Adolescence 1 credit 1 period 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.

#### **CFS157**

#### Marriage and Family Life 3 credits 3 periods 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 credits 3 periods lecture

Study of human development from the prenatal stage through adolescence, with consideration of parent and adult roles in the life experience of the growing child. Independent observation of children and personal investigation into child-related issues in contemporary America included. **Prerequisites:** None.

#### CFS177

## Parent-Child Interaction

3 credits 3 periods 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.

#### **CFS178**

## Survey of Early Childhood Education 3 credits 3 periods lecture

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 1 period lecture

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 credits 3 periods lecture

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 credits 3 periods 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 credits 3 periods lecture

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.

#### CFS242

#### Curriculum Planning for Diversity 3 credits 3 periods 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 3 periods 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 credits 3 periods 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 & Family Studies Seminar 1 credit 1 period 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-thejob problems. **Prerequisites:** Departmental approval. **Corequisites:** CFS264AA or CFS264AB or CFS264AC, initial enrollment in internship module.

#### CFS264AA

#### Child & Family Studies Internship 1 credit 5 periods 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 the first time enrolled in any CFS264 module.

#### CFS264AB

#### Child & Family Studies Internship 2 credits 10 periods 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 the first time enrolled in any CFS264 module.

#### CFS264AC

#### Child & Family Studies Internship 3 credits 15 periods 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 the first time enrolled in any CFS264 module.

#### **CFS277**

## Adult-Adolescent Interaction 3 credits 3 periods 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 1 period 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 1 period 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. **Pre**-

#### CFS290AA

#### Child Abuse: Identification & Reporting in Child Care Settings 1 credit 1 period lecture

requisites: CFS/ECH176.

(*Not offered every semester*) Identification, recording, and reporting by child care providers of sexual abuse, physical abuse, or neglect of young children. **Prerequisites:** None.

#### ECH181

#### Enhancing Infant Development 1 credit 1 period lecture

Introduction to principles of development in infants from birth through 18 months. Emphasis on infant individuality and adult-infant interactions in practical care and play activities. **Prerequisites:** None.

#### ECH182

#### Enhancing Toddler Development 1 credit 1 period 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.

#### ECH236 Learning

#### Learning Materials for Young Children 1 credit 1 period 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 1 period 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.

#### ECH271

#### Arranging the Environment 1 credit 1 period 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 1 period 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.

#### ECH275

## Literacy Development & the Young Child

1 credit 1 period lecture

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 1 period lecture

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.

#### ECH287

## Professional Development in Early Childhood Education

#### 1 credit 1 period lecture

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.

#### ECH288

#### Community Resources and Referral 1 credit 1 period 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.

## CHD – Chemical Dependency

#### CHD284

#### Current CD Issues Seminar 0.5 credit 0.5 period 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 1 period 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.

## CHI – Chinese

#### CHI115

#### Beginning Chinese Conversation I 3 credits 3 periods lecture

Introduction to Chinese sound system, basic grammar, and vocabulary necessary to develop speaking ability in Mandarin Chinese. Designed for students seeking speaking and listening ability with little emphasis on writing and reading Chinese characters. **Prerequisites:** None.

## CHM – Chemistry

#### CHM090

#### Preparation for Fundamental Chemistry

#### 1 credit 1 period lecture

A developmental course designed to review basic math and chemistry principles of students deficient or insecure in these areas. Stresses individualized instruction and hands-on experience. Serves to prepare the student for CHM130. **Prerequisites:** None.

#### CHM107/107LL

#### Chemistry and Society & Lab 4 credits 6 periods 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.

#### CHM130/130LL

#### Fundamental Chemistry & Lab 4 credits 6 periods lecture & lab

LEC: Elements of general chemistry for all students. Serves to prepare the student for CHM151 or CHM230. Prerequisites: Grade of "C" or better in CHM090, or MAT091, or MAT092, or MAT102, or satisfactory score on math placement exam. LAB: Laboratory experience in support of CHM130. Prerequisites or Corequisites: CHM130. Course Notes: Course content designed to meet the needs of students in such areas as agriculture, home economics, nursing, and physical education, among others.

#### CHM138/138LL

#### Chemistry For Allied Health & Lab 4 credits 6 periods 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 MCCD. 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.

#### CHM151/151LL

General Chemistry I & Lab 4 credits 6 periods lecture & lab

LEC: A detailed study of the principles of chemistry. Designed for science majors and students in pre-professional curricula. Completion of CHM151LL required to meet the Natural Science requirement. **Prerequisites:** (CHM130 and CHM130LL) or one year high school chemistry with a grade of "C" or better, and completion of Intermediate Algebra or equivalent. **LAB:** Laboratory experience in support of CHM151. **Prerequisites:** CHM130LL or equivalent. **Prerequisites:** CHM131L or equivalent.

#### CHM152/152LL

#### General Chemistry II & Lab 4 credits 6 periods lecture & lab

LEC: A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. **Prerequisites:** CHM151 and CHM151LL. **LAB:** Laboratory experience in support of CHM152. **Prerequisites:** CHM151LL or equivalent. **Prerequisites or Corequisites:** CHM152.

#### CHM154/154LL

#### General Chemistry II with Qual & Lab 5 credits 9 periods lecture & lab

LEC: A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, kinetics, electrochemistry and other selected topics. Includes qualitative analysis. Prepares students for all sophomore chemistry courses. Completion of CHM154LL is required to meet the Natural Science requirement. Prerequisites: CHM151 and CHM151LL. LAB: Laboratory experience in support CHM154. Includes qualitative of analysis. Prerequisites: CHM151LL or equivalent. Prerequisites or Corequisites: CHM154.

#### CHM230/230LL

Fundamental Organic Chemistry & Lab 4 credits 6 periods 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:** CHM130LL, or CHM151LL, or equivalent. Prerequisites or Corequisites: CHM230. Course Notes: Course content designed to meet the needs of students in such areas as agriculture, home economics, nursing, pre-physician assistant, and physical education, among others.

#### CHM235/235LL

#### General Organic Chemistry I & Lab 4 credits 7 periods 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 or equivalent. LAB: Laboratory experience in support of CHM235. Prerequisites: CHM152LL, or CHM154LL, or Prerequisites equivalent. or Corequisites: CHM235.

#### CHM236/236LL

#### General Organic Chemistry IIA & Lab 4 credits 7 periods lecture & lab (Spring only)

LEC: Study of chemistry of carboncontaining compounds continued. Structural determination and additional reaction mechanisms and modern methods of synthesis emphasized. Prerequisites: CHM235 and CHM235LL or equivalent. LAB: Laboratory experience in support of CHM236. Prerequisites: CHM235LL or equivalent. Prerequisites or Corequisites: CHM236.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

#### CHM238/238LL

#### General Organic Chemistry IIB & Lab 5 credits 9 periods lecture & lab (Spring only)

LEC: Alternate to CHM236. Study of chemistry of carbon-containing Structural compounds continued. 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 Prerequisites equivalent. or Corequisites: CHM238.

#### CHM298AA-AC Special Projects

1-3 credits 1-3 periods 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. Professionaltype 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

#### CIS100

## Internet: A Tool For Learning

**0.5 credit 0.5 period lecture + lab** Use of the Internet to promote learning. Focus on Internet services and access. Information provided on browsing, Internet addresses, naming conventions, search concepts and techniques, using bookmarks and capturing information. **Prerequisites**: None.

#### **CIS102**

#### Interpersonal and Customer Service Skills for IT Professionals 1 credit 1 period lecture

Examines behaviors necessary to develop and support an effective client service organization. Focuses on methods of increasing the effectiveness of help-desk professionals when responding to a range of customer conditions. **Prerequisites:** None.

#### CIS103 Using Help Desk Software 2 credits 3 periods lecture + lab

Help desk software applications for tracking calls, querying data, recording macros, and generating reports. **Prerequisites:** CIS105 or permission of instructor.

#### **CIS105**

## Survey of Computer Information Systems

3 credits 4 periods lecture + lab

Overview of computer technology, concepts, terminology, and the role of computers in society. Discussion of social and ethical issues related to computers. Use of word processing, spreadsheet, database, and presentation software. Includes programming and use of the Internet. Exploration of relevant emerging technologies. **Prerequisites:** None.

### CIS/BPC114AE

Excel: Level I

1 credit 2 periods 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 2 periods 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.

#### CIS/BPC114CE Excel: Level III

#### 1 credit 1 period 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 credits 5 periods 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.

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#### CIS/BPC117AM

Database Management: Microsoft Access – Level I

#### 1 credit 2 periods 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 2 periods 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 1 period 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 credits 5 periods lecture + lab

Introduction to the basic elements, exploration of additional components and common database management problems related to the Microsoft Access program. Combines the contents of BPC/CIS117AA and BPC/CIS117BA and BPC/CIS117CA. **Prerequisites**: None.

#### CIS/BPC118AB

## PowerPoint: Level I

1 credit 2 periods lecture + lab

Use of Powerpoint software to produce professional-quality presentation visuals. **Prerequisites:** None.

#### CIS/BPC120AF

### Computer Graphics: Adobe Photoshop: Level I

### 1 credit 2 periods 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 1 period 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 1 period 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

#### Computer Graphics: Macromedia Flash 3 credits 4 periods lecture + lab

Provides students with the ability to use Macromedia 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 credits 4 periods 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 MS-DOS Operating System

#### 1 credit 2 periods lecture + lab

The use of the MS-DOS operating system: basic concepts, internal and external commands, subdirectories, and editor. **Prerequisites:** None.

#### CIS/BPC121AE Windows Operating Sys

#### Windows Operating System: Level I 1 credit 2 periods 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/BPC121AG

#### Windows 98 - Level I 1 credit 2 periods 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 2 periods 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 2 periods lecture + lab

Microsoft (MS) Windows 98 network software package. Covers enhanced features, user interface enhancements, maintenance and troubleshooting tools. Configuration emphasized. **Prerequisites:** BPC121AG or CIS121AG.

#### CIS124AA

#### Project Management Software: Level I 1 credit 1.7 periods 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 1.7 periods 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 2 periods 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 credits 4 periods 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.

#### CIS/BPC133AA

#### Internet/Web Development Level I-A 1 credit 2 periods 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 1 period 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.

#### CIS/BPC133CA

#### Internet/Web Development Level I-C 1 credit 1 period 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 credits 4 periods 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 credits 4 periods 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.

#### CIS159

#### Visual Basic Programming I 3 credits 4 periods 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.

## CIS162AA

#### C: Level I

#### 3 credits 4 periods 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.

#### CIS162AB

C++: Level I

#### 3 credits 4 periods 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.

#### CIS162AC

## Visual C++: Level I

**3 credits 4 periods 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 credits 4 periods 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.

#### CIS163AA

#### Java Programming: Level I 3 credits 4 periods lecture + lab

Introduction to Java programming. Includes features needed to construct Java Applets, Java Applications, control structures, methods, arrays, character and string manipulation, graphics, and object-oriented programming. **Prerequisites**: CIS105.

#### CIS163AB

#### Java Programming for the AS/400 3 credits 4 periods lecture + lab

Introduction to VisualAge for Java and Borland's JBuilder. Writing applications and building graphical user interfaces for applications, using VisualAge programming paradigm. **Prerequisites**: (CIS105 and CIS122AB), or permission of instructor.

#### **CIS166**

## Web Scripting/Programming

**3 credits 4 periods 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.

#### **CIS169**

## Introduction to Visual Basic for Applications

#### 3 credits 4 periods lecture + lab

Introduction to Visual Basic for Applications (VBA) using Microsoft Office environments. Includes Dynamic Data structures, VBA class modules and error trapping and handling. Creation of customized office applications and network shares as well as multimedia techniques also covered. **Prerequisites:** CIS159 or permission of instructor.

#### CIS183AA

## Microsoft Works

3 credits 4 periods 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 credits 4 periods 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 credits 4 periods 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 credits 3 periods lecture**

Investigation, analysis, design, implementation and evaluation of business computer systems. **Prerequisites:** Any programming language or permission of instructor.

#### CIS225AB

#### Object-Oriented Analysis and Design 3 credits 3 periods lecture

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.

#### **CIS234**

#### XML Application Development 3 credits 4 periods 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) and (CIS117DM or CIS119DO) or permission of the instructor.

#### CIS235

### e-Commerce

## 3 credits 4 periods 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 credits 3 periods 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 credits 3 periods 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 & Design 3 credits 3 periods 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.

#### CIS259

#### Visual Basic Programming II 3 credits 4 periods 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 credits 4 periods 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 credits 4 periods 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 credits 4 periods lecture + lab

Advanced level C++ programming with emphasis on arrays, data management, dynamic memory allocation, objectoriented 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 credits 4 periods 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 credits 4 periods 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, & AC

#### Computer Information Systems Internship

1, 2, & 3 credits 6, 12, & 18 periods lab Work experience in business or industry. **Prerequisites:** Permission of instructor.

## CIS298AA, AB, & AC

## Special Projects

**1, 2, & 3 credits 1, 2, & 3 periods 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. Professionaltype 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.

## CNT – Cisco Networking Technology

#### **CNT140**

#### Cisco Networking Basics 4 credits 6 periods lecture + lab

Introduction to the computer networking field. Covers network terminology and protocols, local area networks (LAN), and wide area networks (WAN). Includes Open Systems Interconnection (OSI) models, cabling and cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Preparation for the Cisco Certified Network Associate examination. **Prerequisites:** None.

#### **CNT150**

#### Cisco Networking Router Technologies 4 credits 6 periods lecture + lab

Knowledge of skills to install, configure, customize, maintain and troubleshoot Cisco routers and components. Preparation for Cisco certification examination. **Prerequisites:** CNT140 or permission of instructor.

#### **CNT160**

#### Cisco Switching Basics and Intermediate Routing 3 credits 4 periods lecture + lab

Advanced Internet Protocol (IP) addressing techniques, Variable Length Subnet Masking (VLSM), Intermediate routing protocols, Routing Internet Protocol version 2 (RIPv2), Single-area Open Shortest Path First (OSPF), and Enhanced Interior Gateway Routing Protocol (EIGRP), Command Line Interface configuration of switches, Ethernet switching, Virtual Local Area Networks (VLANS), Spanning Tree Protocol (STP) and Virtual local-area Network Trunking Protocol (VTP). Preparation for Cisco Certified Network Associate certification examination. Prerequisites: CNT150 or permission of instructor.

#### **CNT170**

#### Cisco Wide Area Networks (WAN) Technologies

3 credits 4 periods lecture + lab

Advanced Internet Protocol (IP) techniques including addressing Network Address Translation (NAT) Port Address Translation (PAT) and Dynamic Host Control Protocol (DHCP). Also covers Wide Area Network (WAN) technology and terminology, Point-to-Point Protocol (PPP), Integrated Services Digital Network (ISDN), Dial on Demand Routing (DDR), Frame Relay, and network management. Preparation for Cisco Certified Network Associate certification examination. Prerequisites: CNT160 or permission of instructor.

### **COM – Communication**

#### COM080

Conversation Circles

#### **3 credits 3 periods lecture** Practice in conversing in English for non-

native speakers. Emphasis in developing conversational techniques to facilitate building and maintaining relationships: May be repeated for a total of six (6) credit hours. **Prerequisites:** None.

### COM100 Intro to Human Communication

3 credits 3 periods lecture

Theory and practice of communication skills in public, small group, and interpersonal settings. Includes study of the speech communication process. **Prerequisites:** None.

#### COM110 Interpersonal Communication 3 credits 3 periods 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.

#### COM120

#### Pronunciation of American Speech 3 credits 3 periods 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.

#### COM207

#### Introduction to Communication Inquiry

#### 3 credits 3 periods lecture

Overview of theory and methodological practice in communication with particular attention to scholarly writing skills. Emphasis on development of critical thinking skills through active participation in the research process. **Prerequisites:** ENG101 or ENG107 or equivalent, and COM100 or equivalent, or permission of instructor. **Course Note:** Recommended for the communication major.

#### COM222

## Argumentation

## 3 credits 3 periods lecture

Discussion and practice of the use of evidence, applied reasoning, recognition of fallacies, selection of arguments, and methods of analyzing issues. **Prerequisites:** ENG101 or ENG107 or equivalent.

#### **COM225**

#### Public Speaking 3 credits 3 periods lecture

Designed to improve one's selfconfidence and self-concept through improving communication skills used in public speaking. To enhance each student's ability to present his/her ideas in an organized time constrained format. To improve critical thinking skills and enhance student's ability to express himself or herself objectively, subjectively, and creatively. Prerequisites: ENG101 or ENG107 or equivalent. NOTE: Course changes not available at time of printing. Consult wih Academic Advisement.

#### COM230

## Small Group Communication 3 credits 3 periods 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:** ENG101, or ENG107, or equivalent.

#### COM/THP241

## Performance of Literature 3 credits 3 periods lecture

The study, analysis, and preparation for performance of prose, poetry, and dramatic literature. Preparation of material for public audiences. **Prerequisites:** ENG101 or ENG107 or equivalent.

#### COM259

#### Communication in Business & Professions

#### 3 credits 3 periods lecture

Interpersonal, group, and public communication in business and professional organizations. Emphasis on oral communication. **Prerequisites:** ENG101 or ENG107 or equivalent.

#### COM263

#### Elements of Intercultural Communication

**3 credits 3 periods lecture** Basic concepts, principles, and skills for improving oral communication between persons from different minority, racial, ethnic, and cultural backgrounds. **Prerequisites:** None.

#### COM/THP271

#### Voice and Diction

#### 3 credits 3 periods 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 3 periods 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 credits 1-3 periods 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.

## CPD – Counseling & Personal Development

#### CPD100

#### Orientation for Student Development 1 credit 1 period 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.

#### CPD101

#### Personal Development 2 credits 2 periods lecture

#### Designed to resist

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 credits 2 periods 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 credits 2 periods lecture

Designed to assist students making career choices. Focuses on selfassessment in terms of educational and career opportunities and reasonable possibilities in the world of work. Includes assessment for personal/career interests, values, needs, attitudes, skills, and other potential, and exploration of occupational information to establish career and educational goals. **Prerequisites:** None.

#### CPD102AD

## Eliminating Self-Defeating Behavior 2 credits 2 periods 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.

#### CPD102AE

#### Exploration of Values 2 credits 2 periods lecture

Designed to explore values as guidelines to directions taken in life. Emphasis on value definition and personal value clarification. Includes strategies for implementing knowledge of personal values in various life roles. **Prerequisites:** None.

#### CPD102AH

#### Stress Management 2 credits 2 periods 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 credits 2 periods 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 1 period 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.

#### CPD102AS

#### **Conflict Resolution** 2 credits 2 periods 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:** 

#### CPD102AT

None.

## Building Self-Esteem

2 credits 2 periods 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 credits 2 periods 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 credits 2 periods 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 credits 2 periods 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 credits 2 periods 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.

#### CPD103BH

## Male-Female Communication 2 credits 2 periods lecture

Designed to provide students with a better understanding of male-female characteristics and how that along with a renewed emphasis on basic communication skills will improve communication between the sexes. **Prerequisites:** None.

#### CPD103BJ Dynamic Parenting 2 credits 2 periods lecture

Designed to provide students with an understanding of parenting dynamics and effective communication between parents and children. Emphasis on building self-esteem, developing coping skills, behavior modification, and other techniques for improving parenting and communication in a variety of circumstances. **Prerequisites:** None.

#### CPD103BK Single Again

#### 2 credits 2 periods lecture

Designed to provide those who have experienced breakup, separation, divorce, or widower/widowhood, lifestyle, an opportunity to examine their position in life and develop skills and confidence necessary to proceed, temporarily or indefinitely, as a single person. **Prerequisites:** None.

#### CPD103BL

#### Dynamics of Leadership 2 credits 2 periods lecture

Designed to provide strategies that may be used when assuming leadership roles. Focus on improving supervisory confidence through the development of appropriate competitive behaviors, problem-solving skills, and techniques of leadership. **Prerequisites:** None.

#### **CPD104**

#### Career and Personal Development 3 credits 3 periods 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 values. Emphasis on and 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.

#### CPD/HLR105AA

## Contemporary Issues: Humor and Play 2 credits 2 periods lecture

Explores nature and nurturing of humor and play. Examines approaches to balancing work and play. Emphasis of humor and play as tools to promote health and overall wellness. **Prerequisites:** None.

#### CPD/GBS126

### Writing Resumes

1 credit 1.7 periods 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 credits 3 periods 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 credits 3 periods 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 available according grading to procedures outlined in catalog. Prerequisites: None.

## **CRE – Critical Reading**

Please Note: For additional Reading courses, see RDG, starting on page 313.

#### **CRE101**

#### Critical and Evaluative Reading I 3 credits 3 periods lecture

Emphasis on applying critical inquiry skills to varied and challenging reading materials. Includes analysis, synthesis, and evaluation through written discourse. **Prerequisites:** ENG101 and [reading placement test score of 41 or higher (ASSET), or grade of "C" or better in RDG091, or permission of instructor.]

## CRW – Creative Writing

#### **CRW120**

#### Introduction to Writing Children's Literature

#### 3 credits 3 periods 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.

#### **CRW150**

#### Introduction to Creative Writing 3 credits 3 periods lecture

Introduces the student to elements and techniques of creative writing in a variety of genres; teaches terminology and needed for successful concepts 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 credits 3 periods 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 credits 3 periods 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 poems. finished, marketable **Prerequisites:** None. CRW150 recommended but not required.

#### **CRW170**

#### Introduction to Writing Fiction 3 credits 3 periods 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.

#### **CRW180**

#### Introduction to Writing Nonfiction 3 credits 3 periods 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 marketable quality of creative nonfiction. **Prerequisites:** None. CRW150 recommended but not required.

#### **CRW190**

#### Introduction to Screenwriting 3 credits 3 periods lecture

Overview of screenwriting elements; introduction to screenwriting techniques. **Prerequisites:** None. **CRW150** recommended but not required.

#### **CRW200**

#### **Readings for Writers** 1 credit 1 period lab

Analysis and evaluation of selected readings to raise an individual's level of writing using print and online reference materials and resources; selection of important texts and research techniques to compose and annotate a reading list in areas of interest. May be repeated for a total of six (6) credits. Prerequisites: CRW150, or permission of instructor.

## **CRW201**

#### Portfolio 1 credit 1 period lab

Methods for selecting work and compiling a portfolio of creative writing. Prerequisites: Acceptance to the Creative Writing program, completion of nine (9) credit hours of CRW course work, or permission of program director.

#### **CRW202**

#### The Writer As Witness 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Studio course focusing on journal writing. Prerequisites: CRW150 or permission of instructor.

#### **CRW220**

#### Intermediate Writing Children's Literature

#### 3 credits 3 periods 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.

#### CRW240AA

#### Studio Workshop I: The Short Short Story

#### 1 credit 1 period lecture

Studio course focusing on the short short story; prewriting, writing, analysis, evaluation, and revision of writing in that genre. **Prerequisites:** None.

#### CRW240AB

#### Studio Workshop I: Publishing Your Work

#### 1 credit 1 period lecture

Studio course focusing on elements of publication including manuscript preparation, appropriate markets, query, and cover letters. Prerequisites: None.

#### CRW240AD

#### Writing Studio Workshop I: **Short Fiction Revision** 1 credit 1 period lecture Workshop exploring revision techniques for short fiction. Prerequisites: None.

#### CRW240AE

#### Writing Studio Workshop I: The Prose Poem

#### 1 credit 1 period lecture

Studio course focusing on writing the prose poem; prewriting, writing, analysis, evaluation, and revision of prose poetry. Prerequisites: None.

#### CRW240AF

#### Writing Studio Workshop I: Dramatic Monologue

#### 1 credit 1 period lecture

Studio course focusing on the dramatic prewriting, monologue; writing, analysis, evaluation, and revision of dramatic monologue in a variety of genres. Prerequisites: None.

**Course Descriptions** 

CRW240AG Writing Studio Workshop I: Poetry Revision 1 credit 1 period lecture Revision techniques for poetry. Prerequisites: None.

#### CRW242AA

#### Writing Studio Workshop I: Memoir 2 credits 2 periods lecture

Studio course focusing on memoir writing; prewriting, writing, analysis, evaluation, and revision of memoir writing, primarily in nonfiction. **Prerequisites:** None.

#### CRW242AB

#### Writing Studio Workshop I: Discovering Voice in Poetry 2 credits 2 periods lecture

Studio course focusing on discovering voice in poetry; prewriting, writing, analysis, evaluation, and revision of poetry in a variety of forms. **Prerequisites:** None.

#### CRW242AD

Writing Studio Workshop I: Magical Realism

#### 2 credits 2 periods lecture

Studio course focusing on using magical realism in writing. Prewriting, writing, analysis, evaluation, and revision of magical realism, primarily in fiction. **Prerequisites:** None.

#### CRW242AF

Writing Studio Workshop I: Poetic Forms

#### 3 credits 3 periods lecture

Studio course focusing on writing poetic forms; prewriting, writing in forms, analysis, scansion, evaluation, research, and revision of poetry in a variety of forms. **Prerequisites:** None.

#### CRW242AG

## Writing Studio Workshop I: Dream Writing

2 credits 2 periods lecture

Studio course focusing on writing using dreams and dream imagery; prewriting, writing, analysis, evaluation, and revision of writing in several genres. **Prerequisites:** None.

#### CRW242AH Writing Studio Workshop I: Musical Elements of Poetry 3 credits 3 periods 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.

#### CRW242AI

## Writing Studio Workshop I: Cultural Viewpoints

#### 2 credits 2 periods lecture

Studio course focusing on the influence of culture and ethnicity on the writer, including factors such as age, gender, race, region, class, and sexual preference. Prewriting, writing, analysis, evaluation, and revision of creative writing generated from an exploration of culture. **Prerequisites:** HUM120 or permission of instructor.

#### CRW242AJ

## Writing Studio Workshop I: The Urban Experience

#### 2 credits 2 periods lecture

Studio course focusing on the urban experience as subject, symbol, and influence in creative writing. Prewriting, writing, analysis, evaluation, and revision of creative writing generated from an exploration of the urban experience. **Prerequisites:** HUM125 or permission of instructor.

#### CRW250AA

Writing Studio Workshop II: Exploring Obsession

#### 1 credit 1 period lecture

Intermediate level, multi-genre creative writing, exploring obsessions as a tool for discovery and invention. **Prerequisites:** None.

#### CRW250AC

## Writing Studio Workshop II: Journeys and Excursions

#### 1 credit 1 period lecture

Studio course focusing on creating and writing through the use of journeys, real and imagined; prewriting, writing, analysis, evaluation, and revision of writing in several genres. **Prerequisites:** Acceptance to the Creative Writing program or permission of the program director.

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#### CRW252AA

Studio Workshop II: Unreliable Narrator Fiction

#### 2 credits 2 periods lecture

Intermediate writing workshop exploring uses and types of the unreliable narrator in fiction. **Prerequisites:** Acceptance to the Creative Writing program or permission of the program director.

#### CRW252AB

#### Writing Studio Workshop II: Point of View

#### 3 credits 3 periods lecture

Studio course focusing on point of view; prewriting, writing, analysis, evaluation, and revision; experimentation with using different points of view; students may work in any genre. **Prerequisites:** Acceptance to the Creative Writing program or permission of the program director.

#### CRW252AC

#### Writing Studio Workshop II: Writing Revisionist Myths 2 credits 2 periods lecture

Studio course focusing on writing revisionist myths; prewriting, writing, analysis, evaluation, and revision of writing in several genres. **Prerequisites:** Acceptance to the Creative Writing program or permission of the program director.

#### CRW252AD

#### Writing Studio Workshop II: Creating the Multiple Self in Writing 2 credits 2 periods lecture

Studio course focusing on creating and writing through the use of the multiple self; prewriting, writing, analysis, evaluation, and revision of writing in several genres. **Prerequisites:** Acceptance to the Creative Writing program or permission of the program director.

#### **CRW261**

#### Topics in Writing: Poetry 3 credits 3 periods lecture

Analysis, writing, and revision of genre or element within poetry. **Prerequisites:** CRW150 or permission of instructor.

#### **CRW270**

#### Intermediate Fiction Writing 3 credits 3 periods 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 credits 3 periods lecture** Analysis, writing, and revision of genre or element within fiction. **Prerequisites:** CRW150 or permission of instructor.

#### CRW272

#### Planning and Structuring the Novel 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Studio course workshop format. Requires a complete novel finished, in manuscript, ready for revision and polishing. **Prerequisites:** CRW273 or permission of instructor.

#### **CRW275**

## Writing the Mystery Story

#### 3 credits 3 periods lecture

Introduces the student to the elements and techniques of writing the mystery story; reinforces terminology and concepts for successful participation in writing workshops; facilitates writing practice, evaluation, and revision in the writing of the mystery story; offers individual guidance on the student's development as a writer. **Prerequisites:** CRW150, or permission of instructor.

#### CRW281

## Topics in Writing: Non-Fiction 3 credits 3 periods lecture

Analysis, writing, and revision of genre or element within non-fiction. **Prerequisites:** CRW150 or permission of instructor.

#### CRW290

#### Intermediate Screenwriting 3 credits 3 periods lecture

Drafting and revision of original screenplay; overview of marketing a screenplay. **Prerequisites:** CRW190 or permission of instructor.

### CRW291

#### Topics in Writing: Plays 3 credits 3 periods 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 1 period 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.

## DAE – Dental Assisting Education

#### **DAE101**

#### Preclinical Dental Assisting 2 credits 2 periods 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 3 periods 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 credits 2 periods 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, DAE106, DAE102. DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE203, DAE/DHE204, or permission of instructor.

#### **DAE106**

#### Clinical Dental Assisting 4 credits 4 periods 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 Corequisites: DAE101, instructor. DAE102. DAE104, DAE107, DAE/DHE114. DAE/DHE122, DAE/DHE203, DAE/DHE204, or permission of instructor.

#### **DAE107**

## Clinical Dental Assisting Laboratory 2 credits 6 periods lab

Introduction to specialty dental practices. Clinical assisting with diagnosis, preparation to 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.

#### DAE/DHE114 **Emergency Medicine** 2 credits 2 periods 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.

#### DAE/DHE122

#### Dental Anatomy, Embryology & Histology

#### 2 credits 3 periods lecture + lab

Includes the histology and embryology tissues: developmental of oral 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.

#### DAE/DHE124

#### **Dental Radiography**

#### 2 credits 2 periods lecture

Physics of radiography, theory of production, radiation 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 credits 6 periods 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 of permission the instructor. Corequisites: DAE/DHE124, or permission of instructor.

#### **DAE140 Dental Issues Seminar** 1 credit 1 period lecture

students' Supplements clinical experiences in dental practices. Analysis of clinical procedures in general and specialty dental practices. Recording, tabulating, and evaluation of skills performed. Completion of community oral health projects. Examination of ethical, judicial, and cultural diversity issues involved in the practice of dentistry. 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, DAE144, DAE145, DAE151, DAE224, DAE225, DAE226, DAE227, and DAE228.

#### **DAE144** Pharmacology 1 credit 1 period 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, DAE227, DAE226. DAE228, or permission of the instructor.

#### **DAE145**

#### **Oral Pathology**

#### 2 credits 2 periods 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/DHE203. DAE/DHE114. DAE/DHE204 or permission of instructor. Corequisites: DAE/DHE124, DAE131, DAE140, DAE144, DAE151, DAE224, DAE225, DAE226, DAE227, DAE228, or permission of the instructor.

#### **DAE151**

#### Survey of Dental Office Management 2 credits 2 periods lecture

Basic business procedures and office management skills related to the dental practice. Prerequisites: DAE101, DAE102, DAE104, DAE106, DAE107, DAE/DHE114, DAE/DHE122, DAE/DHE 203, DAE/DHE204, or permission of instructor. Corequisites: DAE/DHE124, DAE131, DAE144, DAE145, DAE224, DAE225, DAE226, DAE227, DAE228, or permission of instructor.

#### DAE/DHE203

#### **Dental Materials**

#### 2 credits 2 periods lecture

Composition, properties and criteria for use of dental materials. Principles of mixing techniques of restorative, preventive, and laboratory dental materials. Prerequisites: (Admission to the Dental Assisting or Dental Hygiene Programs) or permission of instructor.

#### DAE/DHE 204

#### **Dental Materials Laboratory** 1 credit 3 periods 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:** DAE/DHE 203 and Admission to the Dental Assisting or Dental Hygiene Programs or permission of instructor.

#### **DAE224**

#### **General Clinical Practice** 1 credit 5 periods 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.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

#### **DAE225**

#### Pediatric Clinical Practice 1 credit 5 periods 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 5 periods 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 5 periods 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 & Maxillofacial Surgery Clinical Practice

#### 1 credit 5 periods 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 credits 1-3 periods 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. Professionaltype 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.

## DAH – Dance Humanities & DAN – Dance

## DAH100 Introduction to Dance 3 credits 3 periods lecture

Overview of the field of dance focusing on origins, historical development, and cultural characteristics of the various styles of dance. **Prerequisites:** None.

## DAN131

Ballet I

#### 1 credit 3 periods lecture + lab

Introduction to the theory and practice of ballet at the beginning level. Development of movement quality and performance skills. **Prerequisites:** None. **Course Note:** May be repeated for a total of two (2) credit hours.

#### **DAN132**

#### Modern Dance I

#### 1 credit 3 periods lecture + lab

Introduction to the theory and practice of modern dance at the beginning level. Development of movement quality and performance skills. **Prerequisites:** None. **Course Note:** May be repeated for a total of two (2) credit hours.

#### **DAN133**

### Modern Jazz Dance I

**1 credit 3 periods lecture + lab** Introduction to the theory and practice of modern jazz dance at the beginning level. Development of movement quality and performance skills. **Prerequisites:** None. **Course Note:** May be repeated for a total of two (2) credit hours.

## DAN134 Ballet II

#### 1 credit 3 periods lecture + lab

Theory and practice of ballet at the advanced beginning level. Development of movement quality and performance skills. **Prerequisites:** DAN131 or permission of instructor. **Course Note:** May be repeated for a total of two (2) credit hours.

#### **DAN135**

#### Modern Dance II

#### 1 credit 3 periods lecture + lab

Theory and practice of modern dance at the advanced beginning level. Development of movement quality and performance skills. **Prerequisites:** DAN132 or permission of instructor. **Course Note:** May be repeated for a total of two (2) credit hours.

#### DAN136

### Modern Jazz Dance II

#### 1 credit 3 periods lecture + lab

Theory and practice of modern jazz dance at the advanced beginning level. Development of movement quality and performance skills. **Prerequisites:** DAN133 or permission of instructor. **Course Note:** May be repeated for a total of two (2) credit hours.

#### **DAN138**

## Dance Seminar I

#### 1 credit 1 period lecture

Scientific and critical evaluation of work done in level I dance technique allowing the student to engage in in-depth discussion of the theory and practice of dance. **Prerequisites:** None. **Corequisites:** DAN131 or DAN132 or DAN133.

#### **DAN210**

#### Dance Production I

#### 3 credits 3 periods lecture + lab

Introduction to the elements of light, sound, and scenery as they relate to the art of dance. **Prerequisites:** None.

#### DAN211

### Dance Production II

**3 credits 3 periods lecture + lab** Introduction to the theory and practice of makeup and costuming as they relate to dance. **Prerequisites:** None.

#### DAN264 Choreography I 3 credits 3 periods lecture + lab

Study of basic dance choreography to include construction of a phrase, structure and form in a composition, and the basic elements of time, space, and energy. **Prerequisites:** None.

#### **DAN267**

### Dance for Children

3 credits 3 periods lecture

Theory and practice of teaching creative, folk, square, and other dance forms for children. Includes field experience. **Prerequisites:** None.

## DFT – Drafting Technology

#### DFT121

#### Introduction to Architectural Drafting 3 credits 6 periods lecture + lab

Emphasis on basic drafting techniques and principles of architectural drafting. Use of basic drafting instruments. Includes lettering, line weights, dimensioning, multiview projection, floor plans, elevations. construction details, and portfolio development. **Prerequisites:** None.

#### DFT122

#### Residential Architectural Drafting 3 credits 6 periods lecture + lab

Principles of architectural design and residential construction. Development and use of schematics, sketches, elevations, plans, and details for designing residential structures using board and/or CAD (Computer Aided Drafting) skills. **Prerequisites:** (DFT105AA or DFT252AA) and DFT121, or equivalent, or departmental approval.

#### DFT123

#### Commercial Architectural Drafting 3 credits 6 periods lecture + lab

Architectural drafting practices, principles of design, and preliminary planning as applied to commercial architecture. Development and use of schematics, sketches, elevations, plans, and details for designing commercial structures using board and/or CAD (Computer Aided Drafting) skills. Application of local building codes, and architectural graphic standards and specifications. **Prerequisites:** DFT122 or equivalent or departmental approval.

## DFT126

#### Building Trades Blueprint Reading 3 credits 3 periods lecture

Analysis and interpretation of technical drawings common to the construction industry and building trades. **Prerequisites:** None.

### **DFT131**

#### Civil Drafting I 3 credits 6 periods lecture + lab

Preparation of land plats, topographic maps, plans, profiles and sections used in land subdivision, construction, hydrology, structural geology, mining and civil engineering. Photogrammetry, cut and fill calculations, and relationship of field survey work to the engineering office. **Prerequisites:** (DFT121 and DFT252AA) or departmental approval.

#### DFT221

#### Architectural Rendering: Pen & Ink, Technical Techniques

**3 credits 6 periods lecture + lab** Two and three dimensional drawing with shades/shadows, landscape, hardscape, finishes, human figures, and architectural entourage in pencil and ink media. **Prerequisites:** DFT121, or equivalent, or departmental approval.

#### **DFT222**

#### Architectural Rendering: Color, Freehand Techniques

3 credits 6 periods lecture + lab

Emphasis on color rendering of two and three dimensional drawings using a variety of color media. **Prerequisites:** DFT121, or equivalent, or departmental approval.

#### **DFT223**

## Structural Steel Detailing

## 3 credits 6 periods lecture + lab

Study of the manufacture of structural steel and its application in the construction field. Includes study of plates, girders, roof trusses, latticed girders, and beams. Emphasis on drawing and detailing of erection plans and diagrams using board and/or CAD (Computer Aided Drafting) skills and techniques. **Prerequisites:** DFT122, or equivalent, or department approval.

#### **DFT224**

#### Landscape Architectural Drafting 3 credits 6 periods lecture + lab

Application of commercial design techniques to landscape architectural drafting. Selection of materials, awareness of problems, and emphasis on the production of site plan drawings using board and/or computer aided drafting (CAD) skills. **Prerequisites:** DFT122 or equivalent or departmental approval.

#### DFT252AA

#### Computer Aided Drafting I: AutoCAD 3 credits 6 periods lecture + lab

Industrial use of AUTOCAD equipment (hardware and software) in the areas of mechanical, electronic and construction drawings. **Prerequisites:** DFT110, or DFT121, or departmental permission.

#### DFT254AA

#### Computer Aided Drafting II: AutoCAD 3 credits 6 periods lecture + lab

Advanced AutoCAD techniques in constructing three-dimensional objects and symbols, dimensioning and text; advanced techniques for projection, rotation, and translation of objects; advanced plotter use. **Prerequisites:** DFT105AA, or DFT252AA, or equivalent or departmental approval.

#### DFT256AA

#### Computer Aided Drafting III: AutoCAD

#### 3 credits 6 periods lecture + lab

Use of industrial AutoCAD CAD equipment and programs; advanced concepts; customized CAD usage. Creation and use of three-dimensional components and symbols to design complex objects. File management techniques; file archival; custom command creation; use of macro programs to solve design problems. **Prerequisites:** CAD204 or DFT254AA or equivalent.

#### DFT257AD

## Architectural CAD: Architectural Desktop

#### 3 credits 6 periods lecture + lab

Emphasis on the architectural applications of computer aided drafting. Use of computer hardware and software to generate residential working drawings. Focus on floor and foundation plans, elevations, sections, details, schedules, and plotting. **Prerequisites:** DFT122, or equivalent or departmental approval.

#### **DFT260**

#### Introduction to AutoLISP 1 credit 2 periods lecture + lab

Familiarizes AutoCAD users with the basic features and routines of AutoLISP. Loading and using LISP functions. **Prerequisites:** CAD150 or DFT256AA or equivalent.

#### DFT262

#### **3D** Architectural Animation

**3 credits 6 periods lecture + lab** Creation of 3D architectural animations. Includes sketches, storyboards, animation techniques, and portfolio development. **Prerequisites:** DFT122, DFT254AA, or permission of the department.

#### DFT290AA

#### Computer Aided Drafting Update: AutoCAD

#### 1 credit 2 periods lecture + lab

Acquaints experienced users with latest revisions to AutoCAD software.May be taken a maximum of once during an academic year, for a maximum of 4 credits. **Prerequisites:** DFT254AA or equivalent, or permission of department.

#### DFT292

#### The Latest and Greatest for CAD 1 credit 2 periods lecture + lab

The exploration and comparative analysis of the newest software packages on the market designed to enhance or replace existing CAD (Computer Aided Drafting) software. **Prerequisites:** DFT105 and DFT254, or permission of the department.

## DHE – Dental Hygiene Education

#### DHE110

#### Pharmacology 3 credits 3 periods 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 credits 3 periods 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.

#### DHE/DAE114

#### **Emergency Medicine** 2 credits 2 periods 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.

#### **DHE119**

#### Head & Neck Anatomy 3 credits 3 periods 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 multimedia resources. **Prerequisites:** Admission to the Dental Hygiene Program or permission of instructor.

#### **DHE120**

#### Pre-Clinical Dental Hygiene 6 credits 12 periods 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.

#### DHE/DAE122

#### Dental Anatomy, Embryology & Histology

#### 2 credits 3 periods 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.

#### DHE/DAE124 Dental Radiography 2 credits 2 periods 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.

#### **DHE125**

#### Dental Radiography Laboratory 1 credit 3 periods 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:** DAE/DHE124 and admission to the Dental Hygiene Program or permission of instructor.

#### DHE127

#### Prevention of Dental Disease 3 credits 3 periods 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.

### DHE132

### Dental Hygiene Theory I 3 credits 5 periods lecture + lab

Continued study of the dental hygiene process of care with emphasis on planning assessment, 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 credits 9 periods 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.

# DHE/DAE203

## Dental Materials

2 credits 2 periods lecture

Composition, properties and criteria for use of dental materials. Principles of mixing techniques of restorative, preventive, and laboratory dental materials. **Prerequisites:** Admission to the Dental Assisting or Dental Hygiene Programs or permission of instructor.

### DHE/DAE204

### Dental Materials Laboratory 1 credit 3 periods 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: DAE/DHE203 and Admission to the Dental Assisting or Dental Hygiene Programs or permission of instructor.

# DHE212 Dental Hygiene Theory II 2 credits 2 periods 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 credits 15 periods 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 credits 2 periods 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.

# **DHE225**

#### Periodontics

### 3 credits 3 periods lecture

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. **Prerequisites:** Admission to the Dental Hygiene Program or permission of instructor.

## **DHE227**

# Dental Anesthesia

2 credits 4 periods lecture & lab

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. **Prerequisites:** DHE119 and current CPR certification.

### **DHE229**

### Community Oral Health 3 credits 3 periods lecture

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. **Prerequisites:** Admission to the Dental Hygiene Program or permission of instructor.

# **DHE232**

# Dental Hygiene Theory III

2 credits 3 periods lecture + lab

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. **Prerequisites:** (DHE212 and DHE213), and admission to the Dental Hygiene Program. **Corequisites:** DHE233.

### **DHE233**

### Dental Hygiene Clinic III 5 credits 15 periods lab

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. **Prerequisites:** (DHE212 and DHE213), and admission to the Dental Hygiene Program. **Corequisites:** DHE232.

### **DHE290**

# Dental Hygiene Board Review 1 credit 1 period lecture

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. **Prerequisites:** None. **Corequisites:** DHE221. **NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

# DHE298AA-AC Special Projects

# 1-3 credits 1-3 periods 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. Professionaltype 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.

# ECE – Engineering Science

# ECE102

### Engineering Analysis Tools/Techniques 2 credits 4 periods 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 & Design 2 credits 4 periods lecture + lab

Proposed Description: Fundamentals of the design process: engineering modeling, communication, and problemsolving 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 credits 5 periods 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 credits 5 periods 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 credits 5 periods 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

For ECH courses, see CFS course listings, pages 237-239.

# **ECN – Economics**

#### ECN111 Macroecono

# Macroeconomic Principles 3 credits 3 periods 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 and monetary fiscal policies. Prerequisites: None.

### ECN112

### Microeconomic Principles 3 credits 3 periods lecture

Microeconomic analysis including the theory of consumer choice, price determination, resource allocation and income distribution. Includes noncompetitive market structures such as monopoly and oligopoly; and the effects of government regulation. Selected issues examined. **Prerequisites:** None.

# **EDU – Education**

### EDU105

### Substitute Teacher Training 2 credits 2 periods lecture + lab

Survey of issues important to substitute teaching in Arizona. Discussion of certification, professional behavior, and classroom techniques. In school practicum provides hands-on application of concepts. **Prerequisites:** None.

### EDU160

# Introduction to Developmental Disabilities

## 3 credits 3 periods lecture

Basic overview of causation, prevention and habilitation of developmentally disabled individuals. Historical development and influences affecting remediation and treatment of developmentally delayed or disabled individuals. **Prerequisites:** None.

### EDU161

# Family Centered Services 3 credits 3 periods lecture

Specific techniques and strategies available to families that enhance interactions with a special needs child. An overview of dynamics of family-child and parent-child relations. Legislation affecting children with special needs. **Prerequisites:** None.

# EDU170

# Disaster Management for Schools 3 credits 3 periods lecture

School preparedness planning for community disasters and major school crises. Addresses preparedness, response, and recovery. Creation of disaster/crisis management plan. **Prerequisites:** None.

# EDU205

# Self-Assessment for Teaching 3 credits 3 periods lecture

An exploratory course for students considering a teaching career. Examination of the field of education in the United States through field experiences, self-assessment activities, and career information. **Prerequisites:** None.

### EDU206

# **Classroom Strategies For the Exceptional Learner**

# 3 credits 3 periods lecture + lab

Practical experience with exceptional learners in the classroom. Understanding of and teaching strategies exceptional learners for with mild/moderate mental retardation. disabilities. emotional learning disabilities, physical disabilities, and/or other health-related impairments. Prerequisites: EDU222.

# EDU210

# Methods For Working With the ESL Student

### 3 credits 3 periods lecture

Strategies for working with the ESL student in language arts, science, math, social studies, and culture. Components of curriculum content and tutoring techniques emphasized. Designed for pre-baccalaureate students. **Pre-requisites:** EDU225, or permission of instructor. **Course Notes:** Requires fifteen (15) hours of field experience in an elementary or secondary classroom environment.

### EDU211

# Methods For Working With the Bilingual Student

# 3 credits 3 periods lecture

Strategies for working with the bilingual student in language arts, science, math, social studies, and culture. Components of bilingual curriculum content and tutoring techniques emphasized. Designed for pre-baccalaureate students. **Prerequisites:** (EDU225 and proficiency in Spanish), or permission of instructor. **Course Notes:** Requires fifteen (15) hours of field experience in an elementary or secondary classroom environment.

## EDU212 English as a Second Language For Bilingual Students

# 3 credits 3 periods lecture

Techniques for working with English as a Second Language (ESL) students in bilingual settings. Covers multiple intelligences theory and secondlanguage acquisition theories. Methods, materials and programs appropriate for bilingual students emphasized. Designed for pre-baccalaureate students. **Prerequisites:** EDU225.

# EDU213

# Reading and Writing Strategies in an ESL/Bilingual Setting

# 3 credits 3 periods lecture

Theories and terminology in English as a Second Language (ESL). Secondlanguage acquisition and reading emphasized. Techniques, strategies, and learning activities as well as reading comprehension and writing strategies also covered. Designed for prebaccalaureate students. **Prerequisites:** EDU225.

# EDU216

### Introduction to Assessment of Linguistically Diverse Learners 3 credits 3 periods lecture

Introduction to the assessment of Limited English Proficient (LEP) students and programs. Identification, exiting, and ongoing assessment of student learning as well as legal issues and historical perspectives covered. Connection between assessment and instruction included. State standards emphasized. Designed for prebaccalaureate students. **Prerequisites:** EDU225.

# EDU221 Introduction to Education 3 credits 3 periods lecture

Overview of education and educational institutions in our society, including current issues, responsibilities, and qualifications of educators. Opportunity for students to assess their interest in this area. **Prerequisites:** None. **Course Notes:** Requires minimum of 30 hours of field experience in elementary or secondary classroom environment.

## EDU222

# Introduction to the Exceptional Learner 3 credits 3 periods 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.

### EDU225

### Foundations of Approaches to Serving English Language Learners (ELL) 3 credits 3 periods lecture

Rationale for and current educational and legal issues for 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. Approved school-based practicum experience. **Prerequisites:** None.

# EDU230

# Cultural Diversity in Education 3 credits 3 periods lecture

Examination of the relationship of cultural values to the formation of the child's self-concept and learning styles. Examination of the role of prejudice, stereotyping, and cultural incompatibilities in education. Emphasis on preparing future teachers to offer an equal educational opportunity to children of all cultural groups. **Prerequisites:** None.

# EDU240

# Methods for Teaching Structured English Immersion (SEI) and English as a Second Language (ESL)

# 3 credits 3 periods lecture

Methods of developing lesson plans in language arts, science, math, social studies, and culture for English Language Learners (ELL). Emphasis on components of curriculum content, teaching techniques, development and evaluation of teaching materials. Approved school-based practicum required. Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and (EDU225 or departmental approval), or must have a provisional or standard elementary, secondary, or special education teaching certificate.

### EDU241

# Methods for Teaching the Bilingual Student

# 3 credits 3 periods 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) and (EDU225 and proficiency in Spanish), or permission of instructor. **Course Notes:** Requires fifteen (15) hours of field experience in an elementary or secondary classroom environment.

### EDU245

# Internship in Bilingual/ESL Education 3 credits 3 periods lecture

Provides an opportunity for future teachers and teacher aides to receive supervised, practical, on-site experience in a K-12 bilingual or ESL (English as a Second Language) classroom under the direction of professional teachers. **Prerequisites:** (EDU225 and EDU230 and ENG213) and (EDU210 or EDU211), or permission of instructor.

### EDU270

# Learning and the Brain

3 credits 3 periods lecture

Teaching and learning issues within a cognitive processes context. Covers emotion, memory, and recall as well as early brain development and its relationship to learning. Emphasis on current neuroscientific brain research and how it impacts teaching practice in preK-12 classrooms. **Prerequisites:** None.

### EDU282AA-AC

# Volunteerism for Education: A Service Learning Experience

## 1-3 credits 1-3 periods lab

Service-learning field experience within educational systems, citizen advocacy groups, and human service organizations/agency. May be repeated for a total of six (6) EDU282 credit hours; may not repeat specific agency assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog. **Prerequisites:** Permission of instructor.

# EDU/ENH291 Children's Literature 3 credits 3 periods 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 credits 3 periods 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.

# EDU296WC Cooperative Education 3 credits 15 periods 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.

## EDU298AA-AC Special Projects 1-3 credits 1-3 periods 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. Professionaltype 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.

# EMT – Emergency Medical Technology

### EMT/HLR101

# Cardiopulmonary Resuscitation/Basic Cardiac Life Support

### 0.5 credit 0.5 period 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 credits 9.45 periods 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), patientassisted 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 Cardio Pulmonary Resuscitation certification from the American Heart Association, American Red Cross, or other equivalent organization at the Healthcare Provider Level, meeting the new Guidelines 2002. Minimum ninth grade level reading proficiency on the Nelson-Denney Examination or equivalent. Proof of TB testing or chest x-ray with a negative result within 6 months prior to application; immunity to rubella (German measles) and rubeola.

## Ambulance Operations 2 credits 2 periods 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.

# EMT/FSC116

# Emergency Medical Communications (EMD)

1.5 credits 1.8 periods 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, CPR for the Professional Rescuer, or American Heart Association Basic Life Support Health Care Provider validation.

# EMT120

### Spanish for Emergency-Care Providers 1 credit 1 period lecture

Participative course for prehospital and other emergency-care providers. pronunciations, Vocabulary, 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.

# EMT122 American Sign Language for Emergency-Care Providers 1 credit 1 period 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 credits 2.87 periods 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 triangle, pediatric assessment differences, developmental 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.

> For additional information on PC program competencies, visit:

http://www.dist.maricopa. edu/academic/curric/ progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa. edu/academic/curric/ cs.php

## EMT190

# Pediatric Education for Prehospital Providers: Intermediate

0.5 credit 0.72 period 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 neglect, child and family and 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 credits 2.7 periods 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 basic EMT certification or permission of department.

# EMT200AA

# EMT - Basic Certification Renewal Challenge

# 0.6 credit 0.6 period lecture

Designed to contribute to Arizona Department of Health Services (A-DHS) Bureau of Emergency Medical Services (B-EMS) 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 Basic Life Support, American Heart Association Healthcare Provider CPR or equivalent, and Current EMT Basic certification in the state of Arizona.

### EMT201

### Interactive Basic EMT Refresher 1 credit 2.2 periods 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 Basic Life Support EMT certification in the state of Arizona and successful completion of 16 hours of interactive media with documented pretest and post-test validation.

### EMT230

### Advanced Concepts for EMTs 1.5 credits 1.5 periods lecture + lab

Designed to meet Arizona Department of Services Health 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 Basic EMT certification in the state of Arizona.

### EMT235

#### Emergency Cardiac Care 3 credits 3 periods 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 credits 3 periods 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 medications. side effects to EMT/FSC104 **Prerequisites:** or permission of instructor. MAT082 or equivalency preferred but not required.

### EMT/FSC238 Vehicular Extrication & Patient Stabilization

### 2 credits 2 periods 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 multivictim 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.

#### EMT240

### Advanced Cardiac Life Support 2 credits 2 periods lecture

Didactic and psychomotor skills training and validation in techniques of Advanced Cardiac Life Support according to the 1994 Standards and Guidelines of the American Heart Association. Includes endotracheal intubation, ECG arrhythmia recognition, synchronized, unsynchronized and automated defibrillation, cardiovascular pharmacology, and electronic pacemaker. For all health-care related professionals, clinical and prehospital. Prerequisites: Current American Red Cross or American Heart Association Basic Life Support Health Care Provider validation, or National Safety Council Green Cross Professional Rescuer, EMT235, EMT236, or permission of instructor.

## EMT241

### Advanced Cardiac Life Support Refresher Course

#### 0.5 credit 0.5 period lecture + lab

Designed for all levels of emergency medical technicians, nurses, physicians, and physicians' assistants to assure maintenance of didactic and psychomotor skill training in techniques of Advanced Cardiac Life Support according to the 1994 Standards and Guidelines of the American Heart Association. Includes endotracheal intubation, ECG arrhythmia recognition, synchronized, unsynchronized and automated defibrillation, cardiovascular pharmacology, and electronic pacemaker. Prerequisites: Current American Red Cross or American Heart Association Basic Life Support Health Care Provider validation, current validation in Advanced Cardiac Life Support, EMT240, or permission of instructor.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### EMT242

## Pediatric Advanced Life Support 1 credit 1 period 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 course in American Heart Association Health Care Provider or American Red Cross Professional Rescuer or National Safety Council Green Cross Professional EMT235, EMT236, Rescuer, or permission of instructor.

### EMT243

# Pediatric Advanced Life Support Refresher

**0.5 credit 1.5 periods 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 I

**2 credits 3.5 periods 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 credits 4 periods 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 0.5 period lecture

Designed to acquaint all levels of emergency care providers with electrocardiographic (ECG) rhythm analysis and interpretation using the 12lead electrocardiogram (ECG). Required content for identification and treatment of myocardial infarction and its complications. **Prerequisites:** NCE248, or EMT235, or permission of instructor.

### EMT255AA

# Instructional Strategies for EMT Occupations

# 1 credit 1 period lecture

Participative course to prepare all levels of EMT and/or nurses as instructors in EMT programs. Includes writing objectives, preparing class and course reviewing schedules. Arizona Department of Transportation Rules and Regulations, preparing for lecture, developing and using AV (audio visual) aides, processing assignments and exams, classroom discipline, counseling, student/instructor evaluation and methods. **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.

### EMT255AB

### Advanced Cardiac Life Support Instructional Strategies 1 credit 1 period lecture

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).

### EMT255AC

# Pediatric Advanced Life Support Instructional Strategies

### 1 credit 1 period lecture + lab

A participative course to prepare advanced EMTs (Paramedics), physicians, and/or nurses as instructors in Pediatric Advanced Life Support Includes American Heart courses. 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 classes. Advanced Life Support 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 0.5 period lecture + lab A participative course to prepare instructors in Basic Life Support (CPR) Includes American Heart courses. 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

### 0.5 credit 0.5 period 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.

### EMT260

# Advanced Airway Management for EMTs

# 2 credits 2 periods 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)/pharygeal 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 registered nurse with emergency and/or critical care experience; each and all with Medical Control.

### EMT264

# Vascular Access for EMTs 1 credit 1 period 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 Trauma Standards of Care. of Prerequisites: EMT-Basic or registered nurse with emergency and/or critical care experience.

### EMT265

# Pediatric Education for Prehospital Providers: Advanced

# 1 credit 1.43 periods 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 varietv 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 use of specialized interactions, 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 Practicum

12.5 credits 17.37 periods lecture Designed to provide the emergency medical technician with advanced knowledge about the acute critical differences physiology, in pathophysiology, and clinical symptoms, as they pertain to pre-hospital care. Emphasis on emergency 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 an applicable district placement exam, ENG101, EMT235, and EMT236. Comprehensive written, oral and practical evaluation on all prerequisite courses required prior to selection for this course. Student must have a valid Arizona Certification and be employed as an EMT for one full calendar year prior to registration in this course. **Corequisites:** EMT272AB and EMT272LL

### EMT272AB

# Advanced Emergency Medical Technology Practicum

### 12.5 credits 17.38 periods lab

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 pre-hospital care. Emphasis on emergency 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 an applicable district placement exam, ENG101, EMT235, and EMT236. Comprehensive written, oral and practical evaluation on all prerequisite courses required prior to selection for this course. Student must have a valid Arizona Certification and be employed as an EMT for one full calendar year prior to registration in this course. **Corequisites:** EMT272AA and EMT272LL

### EMT272LL

Advanced Emergency Medical Technology Practicum 7.5 credits 37.5 periods 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 credits 4 periods 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 insufficiency, seizure or 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.

### EMT273AA

## Advanced Life Support Refresher Course: Part I

.75 credit .75 period 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 prehospital 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.

### EMT273AB Advanced Life Support Refresher Course: Part II

1 credit 1.25 periods 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.

# EMT273AC Advanced Life Support Refresher Course: Part III

.75 credit .75 period 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-ofstate 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.

#### EMT273AD

### Advanced Life Support Refresher Course: Part IV

1 credit 1.25 periods 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.

# ENG – English

**NOTE:** The student must complete course placement for English placement in order to register for some ENG courses. Consult Academic Advisement.

### ENG061

# **Basic Writing Skills**

## 3 credits 3 periods lecture

Emphasis on basic writing skills, including grammar and mechanics necessary to write clear and correct sentences in paragraphs. **Prerequisites:** Appropriate English placement test score, or ENG056 with a grade of "C" or better, or permission of department/ division chair.

### ENG071

### Fundamentals of Writing 3 credits 3 periods lecture

Emphasis on the fundamentals of sentence, paragraph, and multiparagraph structure. **Prerequisites:** Appropriate English placement test score, or ENG056 with a grade of "C" or better, or ENG061 with a grade of "C" or better, or permission of department/ division chair.

# ENG100AA

# American-English Spelling System 1 credit 1 period 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 ENG071, or permission of instructor.

## ENG100AC

# The Mechanics of Written English 1 credit 1 period 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 ENG071, or permission of instructor.

# ENG101

# First-Year Composition

# 3 credits 3 periods lecture

Standard English writing skills. Emphasis on expository composition. **Prerequisites:** Appropriate English placement test score; or 'C' or better in ENG 071. **NOTE:** Course changes not available at time of printing. Consult wih Academic Advisement.

### ENG102

### First-Year Composition 3 credits 3 periods lecture

Continued development of standard English writing skills. Introduction to research, note taking, organization, and documentation in the preparation and writing of a research paper. **Prerequisites:** ENG101 with a grade of 'C' or better. **NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

# ENG107

#### First-Year Composition for ESL 3 credits 3 periods lecture

Equivalent of ENG101 for students of English as a Second Language (ESL). Standard American English writing skills and emphasis on expository composition. **Prerequisites:** Appropriate ASSET/COMPASS placement test score, or a grade of "C" or better in ENG071 or ESL077. **Course Note:** Taking ESL040 and ESL042 may build skills tested by the ASSET/COMPASS placement.

### ENG108

# First-Year Composition for ESL 3 credits 3 periods lecture

Equivalent of ENG102 for students of English as a Second Language (ESL). Continued development of standard English writing skills. Introduction to research, note taking, organization and documentation in the preparation and writing of a research paper. Not open to students who have completed ENG101. **Prerequisites:** Grade of 'C' or better in ENG107.

# ENG111

### Technical Writing 3 credits 3 periods lecture

Analysis, planning, organization, research, and writing of technical reports and oral presentations for specific jobrelated audiences. Preparation of recommendation and feasibility reports, proposals, and applications of graphics in documents and oral presentations. **Prerequisites:** ENG101 with a grade of 'C' or better, or permission of instructor.

# ENG200

# Reading and Writing About Literature 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture (*Fall only*)

Using writing to explore one's self and the world one lives in; emphasis on expository writing as a means of learning. **Prerequisites:** ENG101 and ENG102. **NOTE:** Course changes not available at time of printing. Consult wih Academic Advisement.

# ENG219

# Life Stories

# 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

### **ENH112**

#### **Chicano Literature** 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

# **ENH120**

### The Literature of Science Fiction 3 credits 3 periods lecture

Surveys the last two hundred years of Science Fiction literature and various other media. Investigates the similarities between Science Fiction and other imaginative literatures and media. Examines the Science Fiction genre, sub genres, and themes from a variety of perspectives, as well as social issues. Prerequisites: None.

# **ENH202**

# World Literature After the Renaissance 3 credits 3 periods lecture

Includes a selection of the world's literary masterpieces from the Renaissance to modern times. Prerequisites: None.

# **ENH204** Introduction to Contemporary Literature 3 credits 3 periods lecture

Survey of poetry, fiction, and drama from 1945 to the present. Prerequisites: None.

**ENH214** Poetry Study 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

# **ENH235**

### Survey of Gothic Literature 3 credits 3 periods 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.

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# **ENH241**

American Literature Before 1860 3 credits 3 periods lecture (Fall only) Includes literature written prior to 1860 in the United States. Prerequisites: None.

# **ENH242**

**American Literature After 1860** 3 credits 3 periods lecture (Spring only) Includes literature written after 1860 in the United States. Prerequisites: None.

# **ENH250**

## **Classical Backgrounds in Literature** 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

cinematic versions Presents 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 credits 3 periods 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 credits 3 periods 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.

### ENH/AIS/WST261

# Native Women's Literature: The Americas

#### 3 credits 3 periods 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 credits 3 periods

Includes novels and short stories of modern writers which reflect significant themes of our time. **Prerequisites:** None.

## ENH/WST285

### Contemporary Women Writers 3 credits 3 periods 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 credits 3 periods lecture

Review of folk and modern literature, including application of literary criteria to folk and modern literature for children. **Prerequisites:** None.

# **EPS- Entrepreneurial Studies**

# EPS102

### Rich Dad's CASHFLOW 2 credits 2 periods 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.

# ESL – English As a Second Language

#### **ESL001**

# Basic English as a Second Language I 6 credits 6 periods 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 1 period 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 1 period 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 1 period 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.

# ESL001AD Basic English as a Second Language I: Employment 1 credit 1 period 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 1 period 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 catalog. May be repeated for a total of two (2) credits.

### ESL001AF

# Basic English as a Second Language I: Everyday Life 1 credit 1 period 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 catalog. May be repeated for a total of two (2) credits.

#### ESL001BA

# Basic ESL I: Personal Health & Safety 2 credits 2 periods 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 catalog. May be repeated for a total of four (4) credits.

### ESL001BB

## **Basic ESL I: Services & Employment** 2 credits 2 periods lecture

Listening, speaking, reading and writing in English at a basic level. Focus on survival skills related to services and employment when living in the United States. Introduction to elementary grammatical patterns. **Prerequisites:** 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 four (4) credits.

## ESL001BC

# **Basic ESL I: Shopping & Everyday Life** 2 credits 2 periods 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 catalog. May be repeated for a total of four (4) credits.

### ESL001CA

### Basic English as a Second Language I: Part I

## 3 credits 3 periods 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 six (6) credits.

#### ESL001CB

### Basic English as a Second Language I: Part II

### 3 credits 3 periods 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 catalog. May be repeated for a total of six (6) credits.

### ESL010 English as a Second Language I: Grammar

### 3 credits 3 periods 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 1 period 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 sentencelevel 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 1 period 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 sentencelevel 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 1 period 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 sentencelevel 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 & Speaking 3 credits 3 periods 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 1 period 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.

## **ESL014**

### Idiomatic English for ESL I 1 credit 1 period lecture

Study of idiomatic English for speakers of English as a Second Language (ESL). Emphasis on commonly misunderstood expressions. Includes practice on a computer or with audio tapes. May be repeated for a maximum of two (2) credits. **Prerequisites:** Appropriate ESL placement test score or permission of instructor.

#### ESL015

### Directed Practice in English for ESL I 1 credit 8 periods lecture + lab

Designed to provide students learning English as a second language the opportunity for the practice of English in a supervised setting. Practice listening, speaking, reading, and writing skills in English using verbs, modifiers, prepositions, and survival vocabulary. **Prerequisites:** Placement or permission of department. **Corequisites:** ESL011, or ESL010, or RDG010, or ESL012.

## ESL020

# English as a Second Language II: Grammar

# 3 credits 3 periods 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 & Speaking

# 3 credits 3 periods 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 of six (6) credits. maximum Prerequisites: Appropriate ESL placement test score or ESL010 or ESL011 or ESL012 or RDG010.

## ESL023

# Vocabulary for ESL II

**1 credit 1 period 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 credits 3 periods 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 & Speaking 3 credits 3 periods 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.

### ESL033

### Vocabulary for ESL III 1 credit 1 period 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 credits 3 periods 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 grading available (Z). Standard 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 & Speaking

3 credits 3 periods 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.

# ESL043 Vocabulary for ESL IV 1 credit 1 period 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 credits 3 periods lecture

Review of grammatical concepts 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 six (6) 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.

### ESL050AA

### Basic Review Grammar For ESL 1 credit 1 period 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.

# ESL050AB

# Intermediate Review Grammar For ESL 1 credit 1 period 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 1 period 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 credits 3 periods 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:** None.

# ESL051AA

# Pronunciation Improvement for ESL Speakers: Vowels

### 1 credit 1 period 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 1 period 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.

#### **ESL054**

# Introduction To The Culture Of The United States

# 3 credits 3 periods lecture

Prerequisites: None.

Reading and writing about American customs, traditions, major historical events, and celebrations. Appropriate for students enrolled in ENG010 or higher level ESL courses. May be repeated for a total of six (6) 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.

### ESL054AA U.S. Culture: History 1 credit 1 period lecture

Reading and writing about American history. Appropriate for students enrolled in ENG010 or higher level ESL courses. 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.

#### ESL067

### Basic Writing Skills for English as a Second Language 3 credits 3 periods lecture

Emphasis on basic writing skills in sentences and short paragraphs using correct, clear, and idiomatic English. **Prerequisites:** Appropriate English placement test score, or ESL040, or ESL042, or permission of department chair.

# **ESL077**

# Fundamentals of Writing English as a Second Language

# 3 credits 3 periods lecture

Emphasis on writing paragraphs and short essays using correct, idiomatic English. **Prerequisites:** Appropriate English or ESL placement score, or ESL040, or ENG056, or ENG061, or ESL042, or ESL067, or permission of department chair.

# FON - Food & Nutrition

#### FON100

# Introductory Nutrition

3 credits 3 periods lecture Basic nutrition concepts for health and fitness. Emphasizes current dietary recommendations for maximizing wellbeing 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 credits 2 periods 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 & Sanitation

### 1 credit 1 period 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 credits 5 periods 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.

### FON122

### Principles of Food and Beverage Service 3 credits 3 periods 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 credits 11 periods 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 4 periods 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 credits 5 periods 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 & Beverage Service Externship

# 1 credit 5 periods lab

(Not offered every semester)

Waiter/waitress serving experiences in a banquet setting; includes instructorassisted 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 credits 5 periods 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 credits 5 periods 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.

### FON181

# French Cuisine

3 credits 5 periods 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 credits 5 periods 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 credits 5 periods lecture + lab

(Not offered every semester) 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 credits 5 periods 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.

### FON190

## Professional Cooking Practicum 7 credits 19 periods lecture + lab

Preparation of hot and cold foods in a commercial food service operation; experience in volume food production preparing salads, soups, stocks, sauces, entrées, 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 3 periods lecture + lab

Preparation of hot and cold foods in a commercial food service operation; experience in volume food production preparing salads, soups, stocks, sauces, entrées, 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.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

#### FON202

# Purchasing for Food Service Systems 3 credits 3 periods lecture

(Not offered every semester)

Food purchasing for institutions: cost factors, quality standards, purchasing practices and controls. **Prerequisites:** None.

#### **FON206**

# Food Service Management

# 3 credits 3 periods 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 credits 3 periods 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 credits 5 periods 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.

### FON219 Buffet Catering 3 credits 5 periods lecture + lab

Focuses on the basic steps of the catering process in a commercial food setting. Includes an overview of safety and sanitation principles. Emphasizes practical experiences in booking and record keeping, function planning, ordering, production, and service set-up and breakdown for both in- house and off-premise catered events. **Prerequisites:** None. **Corequisite:** FON104.

### **FON241**

# Principles of Human Nutrition 3 credits 3 periods 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 lifestyle other 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 or Corequisites: One year high school chemistry with grade of "C" or better, or CHM130 and CHM130LL, or BIO100, or BIO156, or BIO181, or approval of instructor.

### FON271AA

#### Culinary Studies Internship 1 credit 5 periods 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. May be repeated for a total of seven (7) [FON271AA] or six (6) [FON271AB, AC] credits. Prerequisites: FON104, FON180, and departmental approval. FON271AB: Ten (10 hours of work 2 credits 10 periods lab FON271AC: Fifteen (15) hours of work 3 credits 15 periods lab

# FPA- Fiduciary Practices in Arizona

### **FPA101**

### Principles of Fiduciary Practice 1 credit 1 period lecture

Examines the foundations and requirements for fiduciary practice in Arizona including certification. Introduction to office practices, probate, care management, accounting, and decision making. Emphasis on ethical and professional practices. **Prerequisites:** None.

### FPA275AA-AC

Practicum in Fiduciary Practice 1 credit 5 periods lab

2 credits 10 periods lab

3 credits 15 periods lab

Field experience in fiduciary practice. Entails working under the supervision of an Arizona certified fiduciary or other professional in accordance with Arizona certification requirements (Arizona Code of Judicial Administration). Experience guardianship, conservatorship, in and/or personal representative duties. Details of specific assignment determined by student in consultation with instructor. Prerequisites: FPA101 and permission of program director. Course Note: Course may be repeated for a total of nine (9) credits.

# FPT – Forensic Pathology Technology

### **FPT200**

Forensic Technology

3 credits 4.5 periods lecture & lab Designed to give participants advanced knowledge and skills in the field of forensic medicine, including expertise and competence in determining deaths from natural causes and homicides. Provides a solid foundation in medical examiner investigations and forensic technology skills using academic, clinical, and fieldwork experience. Prerequisites: (BIO160 or [BIO201 and BIO202]), proof of TB testing or chest xray with a negative result within 6 months prior to enrollment and immunity to rubella (German measles) and rubeola and permission of instructor.

# FRE – French

# FRE085AA

# Speedy French I

1 credit 1 period lecture

Basic vocabulary and grammar to develop conversational skills in French. Prerequisites: None.

## FRE085AB

# Speedy French II

# 1 credit 1 period lecture

Intermediate vocabulary and grammar to develop conversational skills in French. **Prerequisites:** FRE085AA.

### FRE085AC

# Speedy French III

### 1 credit 1 period lecture

Advanced vocabulary and grammar to develop conversational skills in French. **Prerequisites:** FRE085AB.

### FRE101

Elementary French I

# 4 credits 4 periods 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.

### **FRE102**

### Elementary French II 4 credits 4 periods 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 credits 3 periods 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 credits 3 periods 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 credits 4 periods 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 credits 4 periods 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.

# FRE203

### Advanced Conversational French 4 credits 5 periods lecture + lab

Combines new vocabulary with student's knowledge of basic grammatical patterns to build confidence and competence in speaking French in everyday, culturally oriented situations. Develops listening and speaking skills for rapid everyday conversational exchange in French. Prerequisites: FRE201, or FRE202, or FRE225, or FRE226, or permission of instructor.

# FRE266

### Advanced French II 3 credits 3 periods lecture

Continuation of FRE265, Reading selections from French literature, written reports, and discussions in French designed to further develop reading, writing and speaking skills. **Prerequisites:** FRE202 or departmental approval.

# FSC – Fire Science Technology

### FSC101

### Intro to Fire Service Selection 3 credits 4 periods lecture + lab

Overview of the application and selection processes utilized 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 insite experiences at a fire station. General components of the selection process, the importance of general education, and components of life long learning in career choices. Prerequisites: None.

# FSC102

# Fire Department Operations

11 credits 19.6 periods 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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For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

# FSC/EMT104

# **Basic Emergency Medical Technology** 8 credits 9.45 periods 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), patientassisted 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 Cardio Pulmonary Resuscitation certification from the American Heart Association, American Red Cross, or other equivalent organization at the Healthcare Provider Level, meeting the new Guidelines 2002. Minimum ninth grade level reading proficiency on the Nelson-Denney Examination or equivalent. Proof of TB testing or chest x-ray with a negative result within 6 months prior to application; immunity to rubella (German measles) and rubeola.

### FSC105

### Hazardous Materials/First Responder 3 credits 3 periods 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 relating information to scene Confined management. space operations in accordance with the National Fire Protection Agency. Prerequisites: None.

### FSC106 Introduction to Fire Protection 3 credits 3 periods lecture

History and evaluation of fire department organization. Role of the fire service in the community. Responsibilities of the fire administrator including organization, departmental interdepartmental functions. relationships, management of buildings equipment; techniques and of firefighting. Also includes emergency medical services and fire prevention. Prerequisites: None.

### FSC108

### Fundamentals of Fire Prevention 3 credits 3 periods 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.

## FSC113

## Introduction to Fire Suppression 3 credits 3 periods 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.

### FSC114

### Hazardous Materials First on the Scene/Awareness Level 0.5 credit 0.5 period 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.

# FSC/EMT116 Emergency Medical Communications (EMD)

1.5 credits 1.8 periods 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, CPR for the Professional Rescuer, or American Heart Association Basic Life Support Health Care Provider validation.

### FSC117

# Fire Apparatus

# 3 credits 3 periods 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 credits 3 periods 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 pumpers. **Prerequisites:** None.

### FSC126

## Refresher Training for Hazardous Materials First Responder Operational 1 credit 1 period lecture + lab

Review of fundamentals of containment, prevention, and knowledge of basic hazard and risk assessment techniques. Topics include protective clothing, containing and controlling specific hazards, vapor suppression, and cooling of tanks. Meets the requirements of Department of Labor Part III; Occupational Safety and Health Waste Operational and Emergency Response; Final Rule March 6, 1989 governing Refresher Training. **Prerequisites:** FSC105.

# FSC131

# Introduction to Urban Technical Rescue 3 credits 3 periods 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 for Firefighters

3 credits 4.6 periods lecture + lab

Overview of all aspects of fitness for current and prospective firefighters. Includes mental aspects of performance for optimal achievement on fire department agility tests and firefighting tasks; physical fitness and workout techniques as they apply to performing specific firefighting tasks; individual conditioning strategies, nutritional guidelines, and basic exercise principles. Lifelong fitness and conditioning. **Prerequisites:** None.

# FSC/EMT136

# Women Firefighter Preparation

2 credits 2.87 periods lecture + lab firefighting Designed for women candidates. Includes firefighting techniques and procedure, physical/mental conditioning, health concerns, occupational opportunities, mentorship programs. and Prerequisites or Corequisites: FSC134 or permission of instructor.

### FSC152

## Engine Company Officer 1 credit 1 period 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 credits 3 periods 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.

### FSC204

# Firefighting Tactics and Strategy 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 1 period 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 & Patient Stabilization

# 2 credits 2 periods 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 multivictim 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

principles Quality service 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 credits 3 periods 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 credits 3 periods lecture

Characteristics and activities of current local, national, and international business. An overview of economics, marketing, management and finance. **Prerequisites:** None.

### **GBS205**

# Legal, Ethical, & Regulatory Issues in Business

#### 3 credits 3 periods lecture

Legal theories, ethical issues and regulatory climate affecting business policies and decisions. **Prerequisites:** None.

#### GBS/LAS206

#### Business Law (UCC) 3 credits 3 periods lecture

Legal and ethical aspects of contracts, sales, commercial paper, secured transactions, documents of title, letter of credit, bank deposits, and collections. **Prerequisites:** None.

### GBS/LAS207

### Business Law (General Corporate) 3 credits 3 periods lecture

Legal and ethical aspects of agency, partnerships, corporations, bankruptcy, antitrust, securities, and other regulations of business. **Prerequisites:** None.

# GBS220 Quantitative Methods in Business

# 3 credits 3 periods 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 credits 3 periods lecture

Business applications of descriptive and inferential statistics measurement of relationships, and statistical process management. **Prerequisites:** Grade of "C" or better in GBS220 or MAT172.

## GBS233

### **Business Communication** 3 credits 3 periods 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.

#### **GBS258**

# Principles of Property and Liability Insurance

### 3 credits 3 periods lecture

Basic principles of insurance. Introduction to insurance contracts. Overview of company functions and operations including ratemaking, underwriting, claims, adjusting, and marketing. **Prerequisites:** None.

### **GBS261**

### Investments I 3 credits 3 periods lecture

Various investment forms available, including study of inflation, taxation, government securities, stocks and bonds, real estate and retirement plans. **Prerequisites:** None.

# GBS263

# Personal Insurance

**3 credits 3 periods lecture** Analysis of personal loss exposures and personal insurance coverages including homeowner's, other dwelling coverages, personal liability, auto, life, health, and government programs. **Prerequisites:** GBS258 or permission of instructor.

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### **GBS264**

#### Commercial Insurance 3 credits 3 periods lecture

Analysis of commercial coverages including property, business income, inland marine, ocean marine, crime, boiler, general liability, auto, and worker's compensation. Analysis of loss exposures and explanation of coverage parts. **Prerequisites:** GBS258 or

### GBS270AA

#### Business Internship 1 credit 1 period lab

permission of instructor.

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 credits 2 periods 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 credits 3 periods lab

General business work experience in a business or industry. Eighty hours of designated work per credit totaling 240 hours per semester. Maximum of 3 credits allowed. **Prerequisites:** Permission of Department.

### **GBS294**

# Consumer Credit 3 credits 3 periods lecture

Consumer lending by financial institutions. **Prerequisites:** None.

# GBS298AA-AC

# Special Projects

# 1-3 credits 1-3 periods 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. Professionaltype 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.

# GCU — Cultural Geography & GPH — Physical Geography

# GCU121

# World Geography I: Eastern Hemisphere

3 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

The historical to modern development of Arizona. The interplay between the physical, cultural and economic factors affecting Arizona today. **Prerequisites:** None.

# GPH111

# Introduction to Physical Geography 4 credits 6 periods lecture + lab

Spatial and functional relationships among climates, landforms, soils, water, and plants. **Prerequisites:** None.

# GPH112

# Introduction to Physical Geography 3 credits 3 periods lecture

Spatial and functional relationships among climates, landforms, soils, water, and plants. **Prerequisites:** None.

# GPH113

**Intro to Physical Geography Lab 1 credit 3 periods lab** Laboratory experience in support of GPH112. **Prerequisites** or **Corequisites:** GPH112.

# GPH219

# Introduction to GIS Using ArcGIS 3 credits 3 periods lecture + lab

An introduction to desktop Geographic Information Systems (GIS) technology using ArcGIS software. **Prerequisites:** CIS105 or CSC180 or permission of instructor.

# GLG - Geology

# GLG101

# Intro to Geology I - Physical Lecture 3 credits 3 periods 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

# Intro to Geology I - Physical Lab 1 credit 3 periods lab

May accompany GLG101. Study of common rock-forming minerals, rocks, and maps. **Prerequisites:** None.

# **GLG110**

# Geologic Disasters & the Environment 3 credits 3 periods 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 credits 3 periods 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.

# GLG281

# Geology of Arizona Lab 1 credit 3 periods lab

May accompany GLG280. Examples of specific geologic processes and local areas. May require field trips. **Prerequisites:** None.

# GRK - Greek

# GRK101

### Elementary Classical Greek I 4 credits 5 periods lecture + lab

First semester course in classical Greek, emphasis on written structures of language. Attention placed on classical Greek pronunciation. **Prerequisites:** None.

# GRK102

## Elementary Classical Greek II 4 credits 5 periods lecture + lab

Second semester course in classical Greek, emphasis on written structures of the language. Attention placed on classical Greek pronunciation. **Prerequisites:** GRK101 or departmental approval.

# **GRN – Gerontology**

# GRN102 Supervisory Care Services

# 1.25 credits 1.25 periods lecture

Principles of general supervision, including awareness of resident functioning, crisis intervention, and assistance in the self-administration of medications. Provides foundation for provision of supervisory care services in assisted living facilities. **Prerequisites:** None.

# GRN104

### Personal Care Services 2 credits 2 periods lecture

Principles of aging and examination of common medical conditions associated with aging and physical disabilities. Assisting residents in activities of daily living and measuring vital signs. Provides foundation for provision of personal care services in assisted living facilities. Includes experiential learning activities as well as didactics. **Prerequisites:** GRN102 or permission of Program Director.

# GRN104AA

# Personal Care Services for Certified Nursing Assistants

# 1 credit 1 period lecture

Principles of aging and examination of common medical conditions associated with aging and physical disabilities. Includes medication and treatment components in personal care settings. **Prerequisites:** GRN102, current CNA registration in Arizona, and permission of Program Director. **Course Note:** May not receive credit for both GRN104 and GRN104AA.

## **GRN106**

### Directed Care Services 0.75 credit 0.75 periods lecture

Examination of care needs of those unable to direct self-care. Provides foundation for provision of directed care services in assisted living facilities. Involves experiential learning activities as well as didactics. Emphasis on therapeutic techniques. **Prerequisites:** GRN102 and (GRN104 or GRN104AA), or permission of Program Director.

# **GRN108**

# Management of Assisted Living Facilities

### 0.5 credit 0.5 period lecture

Principles of management and care planning. Includes delegation of authority, development of policies and procedures, and overview of laws and regulations. Provides foundation for management of assisted living facilities. **Prerequisites:** GRN102, (GRN104 or GRN104AA), and GRN106 or permission of Program Director.

# GRN121

### Psychosocial Aspects of Aging 3 credits 3 periods lecture

Examination of sociological, psychological, and behavioral health issues associated with aging including death, dying, and bereavement. Incorporates cultural and cohort influences. Considers economic and political issues. **Prerequisites:** None.

# **GRN122**

### Overview of Aging Services 3 credits 3 periods lecture

Description of the organization and structure of the aging services environment including federal, state, and local roles and responsibilities. Explores the field of gerontology including careers and services using on-line information. **Prerequisites:** None.

# GRN123

# Health and Biophysical Aspects of Aging

### 3 credits 3 periods lecture

Examines theories of aging and processes biological aging and accompanying medical conditions. Includes functional health assessment and mental health factors that affect physical health. Focuses on health adults. promotion for older Prerequisites: None.

#### GRN124 Fundamen

# Fundamentals of Service Delivery 3 credits 3 periods lecture

Addresses interpersonal communication and appropriate behavior in the workplace. Emphasis on care/service plans and documentation on legal records. Identification of regulatory agencies. **Prerequisites:** None.

### GRN202

Activity Programming for Aging Services

# 3 credits 3 periods lecture

Activity program development and implementation in aging services. Particular attention to the programming needs of special populations. Addresses professionalism and credentialing. **Prerequisites:** None.

# GRN226

### Alzheimer's Disease and Dementia 3 credits 3 periods lecture

Examination of Alzheimer's disease and other forms of dementia. Provides the foundation for caregiving. Emphasis on therapeutic techniques. Includes ethical and legal issues. **Prerequisites:** GRN121, GRN122, GRN123 and GRN124) or permission of Program Director.

### GRN230

# Therapeutic Environments for Dementia Care

# 3 credits 3 periods lecture

Design principles for creating a therapeutic environment for dementia care in home and community-based settings as well as other long term care environments. Includes practical application of design principles to reduce difficult behaviors and promote quality of life. Prerequisites: GRN106 or GRN226 or permission of Program Director. Course Note: Appropriate for owners, managers, and caregivers in formal care settings; aging service employees; senior housing designers; informal caregivers; or individuals interested in interior design for special populations.

# GRN236

### Law and the Elderly 3 credits 3 periods lecture

Addresses legal issues of particular importance to elders including health care decision-making, employment and retirement, and financial planning. Considers federal and state statutory and case law. **Prerequisites:** (GRN121, GRN122, GRN123, and GRN124), or permission of Program Director.

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### **GRN240**

# Public Policy and Advocacy 3 credits 3 periods lecture

Overview of public policy as it affects the elderly and aging services. Examination of policies and policy making at federal, state, and local levels. Addresses private sector and citizen involvement. **Prerequisites:** (GRN121, GRN122, GRN123 and GRN124), or permission of Program Director.

## GRN242

### Management and Supervision 3 credits 3 periods lecture

Basic principles in the organization and management of aging services. Decision making, personnel management, team building, volunteers, marketing, and customer service. **Prerequisites:** None.

# GRN246

# Executive Management and Leadership in Aging Services

### 3 credits 3 periods lecture

Examines concepts of executive management and leadership in relationship to the aging services environment. Addresses organizational community issues, roles and relationships, public speaking, and personal leadership development. Prerequisites: (GRN121, GRN122, GRN123, and GRN124) or permission of Program Director.

# GRN248

# Fiscal Management and Fund Development

### 3 credits 3 periods lecture

Examination of revenue sources and fiscal accountability in the provision of aging services. Provides practice in reading and preparing budgets and an explanation of the audit process. Includes proposal writing and processes for grant administration. **Prerequisites:** (GRN121, GRN122, GRN123 and GRN124) or permission of Program Director.

# GRN248AA

# Fiscal Management and Fund Development I

# 1 credit 1 period lecture

Examination of funding revenue sources in the provision of aging services. Provides practice in reading and interpreting budgets and financial statements. **Prerequisites:** (GRN121, GRN122, GRN123 and GRN124) or permission of Program Director.

#### GRN248AB

# Fiscal Management and Fund Development II

# 2 credits 2 periods lecture

Examination of the budgetary process and fiscal accountability in the provision of aging services. Provides practice in preparing and using budgets and an explanation of the audit process. Includes proposal writing and processes for grant administration. **Prerequisites:** GRN248AA or permission of Program Director.

### GRN250AA

Seminar Special Topics in Gerontology 1 credit 1 period lecture

GRN250AB

Seminar Special Topics in Gerontology 2 credits 2 periods lecture GRN250AC

# Seminar Special Topics in Gerontology 3 credits 3 periods lecture

In-depth investigation of a current issue in gerontology. Emphasis on implications for individuals, the elderly, and society at large. Topics vary from semester to semester. Potential topics may include, but are not limited to, ethics, economics, managed care, and spirituality. May be repeated with a change of topic. **Prerequisites:** None. **AC Module Course Note:** May be repeated with change of topic.

#### **GRN260**

# Introduction to Directed Research in Gerontology

### 2 credits 2 periods lecture

Application of basic principles in planning, execution, analysis, and reporting of a research topic in gerontology. Conducted in cooperation with instructor and/or classmates. May be repeated with a change of topic/application. **Prerequisites:** GRN121, GRN122, GRN123, GRN124, and permission of Program Director.

# For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/ academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/ academic/curric/cs.php

### **GRN270**

### Caregiving in Assisted Living Facilities 1 credit 3 periods lab

Provides clinical experience for caregivers in assisted living living facilities. Application of principles for supervisory, personal, and directed care services. Includes awareness of resident functioning, crisis intervention, assisting with self-administration of medication, activities of daily living, measuring vital signs, and therapeutic communications techniques. Emphasis on Arizona rules and regulations. **Prerequisites:** (GRN102, GRN104, and GRN226) or (Current CNA license and GRN226) or GRN106.

#### GRN275AA

Practicum in Gerontology: Elder Care 1 credit 5 periods lab GRN275AB Practicum in Gerontology: Elder Care 2 credits 10 periods lab GRN275AC Practicum in Gerontology: Elder Care

**3 credits 15 periods lab** Field experience in an elder care setting. Details of specific assignment determined by student in consultation with instructor. Provides in-depth experiences in gerontology that cannot be acquired within a classroom. **Prerequisites:** Permission of Program Director. **Course Note:** Modules may be

repeated for a total of six (6) credits.

### GRN275BA

Practicum in Gerontology: Program Development 1 credit 5 periods lab GRN275BB Practicum in Gerontology: Program Development 2 credits 10 periods lab GRN275BC Practicum in Gerontology: Program Development 3 credits 15 periods lab Field experience in program development in an aging services setting. Details of specific assignment determined by student in consultation with instructor. Provides in-depth experiences in gerontology that cannot be acquired within a classroom. Prerequisites: Permission of Program Director. Course Note: May be repeated

for a total of six (6) credits.

## GRN275CA

Practicum in Gerontology: Management 1 credit 5 periods lab GRN275CB Practicum in Gerontology: Management 2 credits 10 periods lab GRN275CC Practicum in Gerontology: Management 3 credits 15 periods lab

Field experience in management in an aging services setting. Details of specific assignment determined by student in consultation with instructor. Provides indepth experiences in gerontology that cannot be acquired within a classroom. **Prerequisites:** Permission of Program Director. **Course Note:** May be repeated for a total of six (6) credits.

# GTC – General Technology

### GTC121

### Construction Estimating I 3 credits 3 periods 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 credits 3 periods lecture

Details of job estimates. Includes unit cost considerations and subcontracting. Emphasis on bid preparation. **Prerequisites:** GTC121 or departmental permission.

# HEB – Hebrew

### **HEB101**

### Elementary Biblical Hebrew I 4 credits 4 periods lecture

Introduction to basic grammar, pronunciation, and vocabulary of the Hebrew language. Emphasis on language skills in listening, speaking, reading, and writing. Study of Hebrew speaking culture.

Prerequisites: None.

# HCC – Health Core Curriculum

# **HCC101** Health Care Today

0.5 credit 0.5 period lecture

Overview of current health care professions, including career and labor market information. Health care delivery system, third party payers, and facility ownership. Health organization structure, patient's rights and quality of care. Prerequisites: None.

# **HCC103**

## Workplace Behavior in Health Care 0.5 credit 0.5 period lecture

Health care and life values. Definition and importance of values and ethics. Work ethic behaviors essential for the health care worker. Professional code of rights ethics, worker's and responsibilities. Prerequisites: None.

# **HCC105**

### Personal Wellness and Safety 0.5 credit 0.5 period lecture

Healthful living practices such as nutrition, stress management, and exercise. Use of principles of body mechanics in daily living activities. OSHA standard precautions. Prerequisites: None.

# **HCC107**

## **Communication and Teamwork in Health Care Organizations** 1 credit 1 period lecture

Emphasis on basic communication skills which facilitate team work in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote team work. Focus on intercultural communication strategies. Prerequisites: None.

# HCC/RES109

### **CPR For Health Care Provider** 0.5 credit 0.5 period lecture

Current American Heart Association standards for one and two rescuer cardiopulmonary resuscitation (CPR) and obstructed airway procedures on the adult, infant, and pediatric victim. Use of automatic, external defibrillator and resuscitation equipment. Prerequisites: None

# **HCC130**

# Fundamentals in Health Care Delivery 3 credits 3 periods 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 (OSHA) Administration 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.

# HCC130AA

# Health Care Today 0.5 credit 0.5 period lecture

Overview of current health care professions including career and labor market information. Health care delivery systems, third-party payers, and facility Health ownership. organization structure, patient rights and quality care. Prerequisites: None.

# HCC130AB

## Workplace Behaviors in Health Care 0.5 credit 0.5 period lecture

Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Prerequisites: None.

# HCC130AC

### **Personal Wellness and Safety** 0.5 credit 0.5 period lecture

Introduces healthful living practices to include nutrition, stress management and exercise. Includes Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Prerequisites: None.

# HCC130AD

### Communication and Teamwork in Health Care Organizations 0.5 credit 0.5 period lecture

Emphasis on 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

# HCC130AE

### Legal Issues in Health Care 0.5 credit 0.5 period lecture

Basic legal terminology used in the health care setting. Legal concepts related to health care employment, medical documentation. and communication. Introduction to regulatory requirements in health care. Prerequisites: None.

# HCC130AF

# Decision Making in the Health **Care Setting**

### 0.5 credit 0.5 period lecture

Principles and application of a decision making model. Description and application of ethics and process improvement and the relationship of both to the decision making model. Prerequisites: None.

# **HCC140**

# Medical Terminology for Health **Care Workers**

# 2 credits 2 periods lecture

Introduction to medical terms used in health care. Body systems approach to common terms related to structures, function, diseases, procedures, and diagnostic tests. Building and analyzing terms using word parts. Selected medical abbreviations symbols. and HCC103, **Prerequisites:** HCC101, HCC105, HCC107 and HCC109. May be taken concurrently with Level II program pathway courses.

# **HCC142**

### Medical Terminology For **Specialty Areas** 1 credit 1 period lecture

Medical terminology used with special care populations and in special services. Includes obstetric, pediatric, mental health, diagnostic imaging, oncology, and surgery terms. Use of word parts, term spelling and pronunciation. Prerequisites: HCC140.

### HCC145

# Medical Terminology for Health Care Workers

## 3 credits 3 periods 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 1 period 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.

### HCC145AB

# Medical Terminology for Health Care Workers II

### 1 credit 1 period lecture

Additional medical terms used in health care. Body systems approach to more detailed terms related to structures, functions, diseases, procedures, and diagnostic tests. Building and analyzing terms using standard word parts. Common abbreviations and symbols and term spelling. **Prerequisites:** HCC145AA.

### HCC145AC

# Medical Terminology for Health Care Workers III

#### 1 credit 1 period lecture

Medical terminology used with special care populations and in special services. Includes obstetric, pediatric, mental health, diagnostic imaging, oncology, and surgery terms. Use of word parts and term spelling. **Prerequisites:** HCC145AA and HCC145AB, or HCC146.

### HCC146

## Common Medical Terminology for Health Care Workers

### 2 credits 2 periods lecture

Common medical terms used in health care. 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.

### HCC151

# Legal and Ethical Issues in Health Care 0.5 credit 0.5 period lecture

Basic legal terminology utilized in the health care setting. The basic legal concepts related to health care employment. Identification of ethical guidelines to include client privacy and rights, as well as the process of ethical decision making. **Prerequisites:** HCC101, HCC103, HCC105, HCC107 and HCC109.

### HCC153

# Decision Making in the Health Care Setting

## 0.5 credit 0.5 period lecture

Principles of the decision-making process using the nine-step format and application of the process. Description and application of process improvement and its relationship to the decision-making model. **Prerequisites:** HCC101, HCC103, HCC105, HCC107 and HCC109.

### HCC160

# Basic Venipuncture Skills 0.25 credit 2.5 periods lab

Equipment required for specimen collection. Laboratory testing abbreviations and codes. Anatomy of the arm and hand. Venous blood collection procedure. Quality assurance measures and tests. **Prerequisites:** HCC130 or (HCC130AA, HCC130AB, HCC130AC, HCC130AD, HCC130AE and HCC130AF), or equivalent.

### HCC161

### Basic Venipuncture Practicum 0.75 credit 3 periods lab

Application of fundamental phlebotomy techniques in a clinical setting. OSHA guidelines to include infection control, personal safety and first aid. Specimen handling and processing. Venous collection procedures performed on clients. **Prerequisites:** HCC160.

# HCC164

# Pharmacology for Allied Health 0.5 credit 0.5 period 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 credits 3 periods 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 BIO162AB, or BIO201).

### **HCC208**

### Health Care Leadership 1 credit 1 period 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.

# HCE - Health Care Education

### **HCE101**

### Customer and Patient Relations 1.5 credits 1.5 periods 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 1 period lecture

Application of basic physiology and psychology of body systems as they relate to an entry-level health care professional's role. **Prerequisites:** HCC130, HCC145 or (HCC145AA, HCC145AB, and HCC145AC), or permission of instructor.

### **HCE108**

# **Basic Phlebotomy: Training for Law Enforcement Officers**

**1 credit 1.5 periods 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 & Specimen Processing: Basic Skills

**1 credit 2 periods lecture + lab** Theory and practice of basic phlebotomy and specimen processing including laboratory test codes, equipment, and procedures. **Prerequisites:** None. **Corequisites:** HCC130, HCC145AA, or permission of Program Director.

### **HCE110**

# Practicum: Fundamental Phlebotomy Skills

# 0.5 credit 3 periods lab

Application of fundamental phlebotomy techniques in a clinical laboratory setting or health care environment. **Prerequisites:** HCE109, or permission of program director.

### HCE110AA

### **Basic Phlebotomy: Training for Law Enforcement Officers**

0.5 credit 1.5 periods lecture + 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

# Phlebotomy & Specimen Processing: Advanced Techniques

1 credit 1.5 periods 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.

#### HCE112

# Practicum: Specialized Phlebotomy Techniques

# 0.5 credit 3 periods lab

Application of specialized phlebotomy techniques in a clinical laboratory setting or health care environment. **Pre-requisites:** HCE109. **Prerequisites** or **Corequisites:** HCE110 and HCE111, or permission of instructor.

# HCE120 Phlebotomy Practicum 1 credit 4.5 periods 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 0.5 credit 3 periods lab

Application of specimen processing techniques in a clinical laboratory setting or health care environment. **Prerequisites:** HCE109 or permission of instructor.

# HCE/PED 148

# Exercise Testing

**0.5 credit 1.5 periods lecture + lab** Study of exercise testing principles as performed under the supervision of a physician. **Prerequisite:** HCC101, HCC103, HCC105, HCC107, and HCC109, or permission of program director. **Corequisites:** HCE140 or permission of program director.

### HCE150

### Overview of Laboratory Assisting 1 credit 1 period 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, medicolegal 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.

### HCE152

Laboratory Assisting: Principles and Procedures

### 2 credits 6 periods lecture + lab

Principles and procedures for preanalytical 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 for documentation. guidelines Prerequisites or Corequisite: HCE150.

#### **HCE158**

# Laboratory Assisting Practicum 2 credits 6 periods 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: HCE150 and HCE152 and permission of program director.

### HCE162

# Aseptic Techniques

## 1 credit 3 periods 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:** None. **Corequisites:** HCC130, HCC145, or permission of Program Director.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### HCE167

### Laboratory Testing in Patient Care Service Centers

**1 credit 1.5 periods 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:** None.

**Corequisites:** HCC130, HCC145, or permission of Program Director.

### **HCE170**

# Overview of Histology (Anatomic) Laboratory

### 1 credit 1 period 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 Includes information principles. management in anatomic laboratories. Importance of management and supervision leadership principles and professional growth and ethical conduct. Prerequisites: Admission to Histology Program or permission of program director. Corequisites: HCE171 and HCE172.

# HCE171

## Histology Techniques Level 1 2 credits 2 periods 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 Histology Program or permission of program director. **Corequisites:** HCE170 and HCE172.

### **HCE172**

### Histology Techniques Level 1 Practicum 3 credits 6 periods 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 Histology Program or permission of program director. Corequisites: HCE170 and HCE171.

# **HCE173**

### Histology Techniques Level 2 3 credits 3 periods lecture

Emphasis on decalcification techniques, ergonomic safety practices for microtomy, and frozen section techniques. Application of embedding orientation by tissue type. Procedures for paraffin embedding station, cryostat and microtome set-up rotary and maintenance, and sharps safety practices for the microtome. Includes techniques for microtomy, specialized microtomy, frozen section, and cytology specimen preparation. Prerequisites: HCE172. Corequisites: HCE174.

### **HCE174**

### Histology Techniques Level 2 Practicum 3 credits 6 periods 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 practices for microtomy. safety 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: HCE172. Corequisites: HCE173.

#### **HCE175**

### Histology Techniques Level 3 3 credits 3 periods lecture

Recognition of basic cellular structure. Identification of carbohydrates classification, pigments, minerals, and lipids in tissues and connective tissue structures. Explanation of chemical staining theory. Stain principles and procedures for nuclear and cytoplasmic structures, carbohydrates and lipids, connective tissue, and tissue pigments and minerals stains. **Prerequisites:** HCE173 and HCE174. **Corequisites:** HCE176.

### HCE176

# Histology Techniques Level 3 Practicum

# 3 credits 6 periods 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:** HCE173 and HCE174. **Corequisites:** HCE175.

### **HCE177**

## Histology Techniques Level 4 3 credits 3 periods lecture

Identification of pathologic organisms and neurological structures. Use of stains for microorganisms and neurological structures. Explanation of theories of histochemical and immunohistochemical staining. Procedures for histochemical immunohistochemical stains. and Overview of specimens for electron microscopy and autopsy procedures. Emphasis on assessing histology processes, workflow laboratory procedure manuals, and workload and productivity recording and monitors. Prerequisites: HCE175 and HCE176. Corequisites: HCE178.

### **HCE178**

# Histology Techniques Level 4 Practicum 3 credits 6 periods lab

Practicum in histology techniques performed in an anatomic laboratory. Identification of pathologic organisms and neurological structures. Use of for microorganisms stains and neurological structures. Application of histochemical and immunohistochemical stains. Observation of electron microscopy and autopsy procedures. Emphasis on histology workflow processes, laboratory procedure manuals, and workload and productivity recording and monitors. Prerequisites: HCE175 and HCE176. Corequisites: HCE177.

### HCE221

### Administration of Medication 3 credits 4 periods lecture + lab

Principles and procedures for administering medications. Includes classifications, uses, effects, legal regulations, calculating dosages, and correct terminology. Emphasis on oral and parenteral of drug administration. **Prerequisites:** None. **Corequisites:** HCC130, HCC145, or permission of program director.

### HCE222

Clinical Procedures

#### 3 credits 4 periods 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:** None. **Corequisites:** HCC130, HCC145 or permission of program director.

### HCE226

# Administrative Procedures

3 credits 3 periods 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:** None. **Corequisites:** HCC130, HCC145 or permission of program director.

# HCE227 Insurance, Billing and Coding

**3 credits 3 periods 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:** None.

Corequisites: HCC130, HCC145 or

permission of program director.

# HCE/BPC229

### Automated Computer System for Medical Office Management 1 credit 3 periods lecture + lab

Principles and procedures in using an office automated computerized system for entering patient information and tracking patient billing. Includes use of accounting cycle from originating data to closing ledger entries. **Prerequisites:** None. **Corequisite:** HCC130, HCC145, or equivalent, or permission of program director.

### HCE251

# **Emergencies in the Medical Office**

**1.5 credits 1.5 periods lecture + lab** Emphasis on methods of identification and response to emergencies in a medical office. **Prerequisites:** None. **Corequisites:** HCC130, HCC145 or permission of program director.

# HCE261

#### Applied EKG 1 credit 1.5 period 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:** None. **Corequisites:** HCC130, HCC140 or HCC145AA, or permission of program director.

# HCE271

### Patient Care Technician Skills 1 credit 1.5 periods lecture + lab

Designed to prepare students for advanced patient care skills. Fundamentals in microorganisms and microbial control. Specimen collection, handling and testing, wound care and catheterization. **Prerequisites:** Permission of Program Director.

### HCE272

## Practicum: Patient Care Technician 1 credit 4.75 periods 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:** Permission of program director.

## HCE274

# Administrative Medical Assisting Externship

# 1 credit 6 periods lab

Practicum in administrative medical assisting. Application of administrative duties, procedures, and knowledge derived from medical assisting courses. **Prerequisites:** HCC130, HCC145, HCE226, HCE227, HCE/BPC229, and permission of program director.

## HCE275

### Clinical Medical Assisting Externship 2 credits 9.6 periods lab

Practicum in clinical medical assisting. Application of clinical skills, procedures, and knowledge derived from medical assisting courses. **Prerequisites:** HCC130, HCC145, or (HCC145AA, HCC145AB, and HCC145AC), HCE102, HCE109, HCE110, HCE162, HCE167, HCE221, HCE222, HCE261, HCE227, HCE229, HCE251, HCE261, and permission of program director.

### HCE281

### Specialty Office Practices

#### 1.5 credits 1.5 periods 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 credits 4 periods 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 overview techniques, critical of 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 credits 3 periods 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

# Health Care Organizations 3 credits 3 periods lecture

Overview of United States health care delivery systems; financing, health policy, impact of managed care, and basic principles of budgeting, cost-benefit analysis, and resource management. **Prerequisites:** ENG102.

### HCR230

## Culture and Health 3 credits 3 periods 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 credits 4 periods 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 equivalent.

# HCR240AA

### Human Pathophysiology I 2 credits 2 periods 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 equivalent.

# HCR240AB

Human Pathophysiology II 2 credits 2 periods 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:** HCR240AA.

# **HES – Health Science**

# HES100 Healthful Living 3 credits 3 periods 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 2 credits 2 periods lecture

Develops awareness of health issues related to women. Examines diseases common to women. Explores predisposing and precipitating factors affecting health and reviews current treatment of disease. Focuses on the development of behaviors that promote a healthy and productive life. **Prerequisites:** None.

# **HES154**

# First Aid/ Cardiopulmonary Resuscitation

# 3 credits 3 periods 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 credits 3 periods lecture

Principles and factual bases of drug use and abuse. Physiological and sociopsychological 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 1 period lecture

HIV transmission and infection; AIDSrelated diseases; prevention resources; effects of HIV/AIDS on society and health care system. **Prerequisites:** None.

## **HES271**

# Prevention and Treatment of Athletic Injuries

# 3 credits 3 periods 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.

# **HES272**

## Clinical Practicum in Athletic Training 1 credit 7.5 periods 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 & Taping Techniques

# 2 credits 2 periods lecture

Expands and enhances practical uses of basic taping and wrapping skills. Handson experience in the use of braces, athletic taping, and elastic wraps to care for athletic injuries. **Prerequisites:** HES271 or permission of instructor.

# For additional information on PC program competencies, visit:

http://www.dist.maricopa. edu/academic/curric/ progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa. edu/academic/curric/ cs.php

# HIP – Home Inspection Program

## HIP101

### Home Inspection: Complete Standards, Requirements, and Procedures 7 credits 7 periods lecture

Coverage of the home inspection profession including practice standards, inspection requirements, and inspection procedures. Emphasis on applying knowledge of structures, exteriors, roofing, plumbing, electrical, heating, cooling, insulation, and ventilation; interiors as it pertains to their types, materials, application, installation, and construction techniques; and home inspection standards in the performance of a home inspection to determine the current condition of a residential dwelling. Prerequisites: None. Course Note: This course is intended to satisfy the state of Arizona's requirement for 80 hours of post-secondary education for certification of home inspectors and will cover all home inspection areas mandated by Arizona state law.

# HIP110

# Home Inspection: Review and Examination

#### 1 credit 1 period lecture

Complete review of the home inspection profession including professional practice standards, inspection requirements, and inspection procedures. Prerequisites: HIP101 or (HIP101AA, HIP101AB, HIP101AC, HIP101AD, HIP101AE, HIP101AF, HIP101AG, HIP101AH, HIP101AI, and HIP101AJ) with a grade of "C" or better, and at least 80 hours of college- verified attendance, or permission of department. Course Note: Students must score at least 70% on the final exam to receive a grade of "C" or better.

### HIP201

# Home Inspection Fieldwork

# 7 credits 7 periods lecture + lab

Student-candidate participation in at least thirty (30) parallel home inspections with logs of these inspections and submission of a minimum of five (5) home inspection reports attached to the certificate state application. Prerequisites: HIP110 with a grade of "C" or better, or a passing score on the National Home Inspector's Examination, or permission of department. Course Note: State law dictates that a certified home inspector may only mentor up to four (4) home inspector candidates at a time.

# HIS - History

### **HIS100**

# History of Western Civilization to Middle Ages

### 3 credits 3 periods 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 West Civilization Middle Ages to 1789

# 3 credits 3 periods 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 credits 3 periods 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 1870 3 credits 3 periods lecture

The political, economic, and social development of United States from Colonial through Reconstruction period. **Prerequisites:** None.

### **HIS104**

### United States History 1870 to Present 3 credits 3 periods lecture

The political, economic, and social development of the United States from Reconstruction period up to present time. **Prerequisites:** None.

# **HIS105**

# Arizona History

# 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Survey of the political, economic, and social forces which have shaped the development of Mexico from Precolumbian times to the present. **Prerequisites:** None.

### HIS/AIS170

# American Indian History of the Southwest

# 3 credits 3 periods 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.

### HIS201

### History of Women in America 3 credits 3 periods lecture

Introduction to women's history from the colonial period to the present. Deals chronologically with changes and developments which have influenced the lives of women. **Prerequisites:** None.

### HIS203

#### African-American History I 3 credits 3 periods 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.

#### **HIS209**

# The Chicano in 20th Century America 3 credits 3 periods lecture

Analysis of the twentieth century experience. Historical perspective of the emergence of Chicanos as an influential minority in the United States. **Prerequisites:** None.

## HIS/PHI/REL243 World Religions 3 credits 3 periods 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.

### **HIS251**

#### History of England to 1700 3 credits 3 periods lecture

Analysis of the major political, cultural, social, and intellectual factors in English historical development from its earliest times till 1660. **Prerequisites:** None.

### **HIS252**

# History of England 1700 to Present 3 credits 3 periods lecture

Analysis of the major political, cultural, social, and intellectual factors in English historical development from 1650 to the present. **Prerequisites:** None.

#### **HIS275**

Soviet Union and Slavic World 3 credits 3 periods lecture

Survey of the principle political, military, economic, social, and cultural developments in the Soviet Union from the Communist seizure of power in 1917 to the present. Includes a brief review of the geography, politics, and culture of pre-1917 Russia as a background. **Prerequisites:** None.

# HIT – Health Information Technology

## HIT101

# Introduction to Health Information 2 credits 3 periods lecture + lab

Investigation of career opportunities, ethics, history, and functions of the health information management profession. The origination, content, and development of patient indexes and patient records. Design and maintenance of manual and computerized health information systems for filing. numbering, and storage of patient information. Prerequisites: HCC130 or permission of instructor.

# HIT103

# Coding for Medical Record Professionals

# 1 credit 1 period lecture

Current coding essentials with the application of International Classification of Diseases (ICD). Includes the coding of diseases and operations/procedures. Overview of the Medicare Prospective Payment System (PPS) including Diagnosis Related Groups (DRG). **Prerequisites:** Certification as a Registered Health Information Administrator (RHIA) or Registered Health Information Technician (RHIT) or equivalent training/experience.

### HIT106

### Legal Aspects of Health Information 3 credits 3 periods lecture

Legal aspects of health records, health information, and the health information department. Application n of general principles of law and health information management to legal proceedings. Emphasis on patient privacy and confidentiality, types of consents, and proper release of health information. **Prerequisites:** HCC130 or permission of instructor.

## HIT150 Health Care Data 2 credits 3 periods lecture + lab

Introduction to data collection methods for health information systems. 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:** [HIT101 and (BPC110 or CIS105)], or permission of instructor.

### HIT180

# Introduction to Medical Billing and Reimbursement

### 2 credits 2 periods 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 instructor.

## HIT181

# Medical Claims Processing

3 credits 5 periods 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:** [(BPC101AA or BPC/CIS121AE) and HIT180], or permission of Program Director. **Prerequisites or Corequisites:** (HIT185 and HIT212), or permission of Program Director.

### HIT185

# ICD Diagnostic Coding

3 credits 5 periods lecture + lab

International Classification of Diseases (ICD) diagnostic code assignment. Use of appropriate guidelines and federal, state, and local compliance standards for diagnoses. **Prerequisites:** [HCC145 and (BIO160 or BIO202)], or permission of Program Director.

### HIT187

# Physician-Based Medical Coding Seminar

# 0.5 credit 0.5 period lecture

Content and development of physicianbased services coding compliance programs. Forum for discussion of classroom, laboratory, and professional practice experiences. **Prerequisites:** (HCC204, HIT185, and HIT214), or permission of Program Director. **Corequisites:** HIT189 or permission of Program Director.

### HIT189

# Professional Practice in Physician-Based Coding

### 1 credit 5 periods lab

Practical application of coding guidelines for the physician-based setting. Use of the International Classification of Diseases and Current Procedural Terminology systems to code ambulatory patient diagnoses and treatment. **Prerequisites:** (HCC204, HIT185, and HIT214), or permission of Program Director.

### HIT201

# Health Information Statistics and Research

2 credits 4 periods lecture + lab

Compilation and usage of various types of administrative and health care statistics including vital records. Overview of the health information research process. Use of computers for computation and data display. **Prerequisites:** [(BPC110 or CIS105), HIT101, and MAT102], or permission of instructor.

### HIT204

#### **Cancer Registry**

# 4 credits 6 periods 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 HIT150) or permission of instructor.

## HIT206 Documentation Standards 2 credits 3 periods lecture & lab

Standards and regulations for health records according to state, federal and accrediting agencies for health care facilities. Development of health information guidelines and methods to ensure timely and complete documentation. **Prerequisites:** HIT101 or permission of instructor.

### HIT207

# Health Information Management and Supervision

2 credits 2 periods lecture

Principles and practices essential to the efficient supervision and management of health information departments. Planning, organizing, directing, and controlling health information processes, personnel, finances, and space. **Prerequisites:** (HIT106 and HIT206), or permission of instructor.

#### HIT209

# ICD Procedure Coding & Inpatient ICD Application

### 2 credits 4 periods lecture + lab

International Classification of Diseases (ICD) procedure code assignment. Use of appropriate coding guidelines and federal, state, and local compliance standards for procedures. Application of diagnostic and procedural codes for inpatient settings. **Prerequisites:** (BIO202, HCC204, and HIT185), or permission of Program Director.

### HIT211

### Advanced Applications of ICD Coding 2 credits 4 periods lecture + lab

Use of references, source documents, and computers for code assignment. Diagnostic-related group guidelines and federal regulations for hospital-based settings. Coding guidelines for home health, long term care, rehabilitation, and other health care settings. Use of codes for administrative purposes, marketing, state and county requirements. **Prerequisites:** (BIO202, HCC204, and HIT185), or permission of Program Director.

# HIT212

**CPT Coding I** 

### 2 credit 3 periods 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. Introduction to computerized encoders. Ethical coding and compliance issues highlighted. **Prerequisites:** [HCC145 and (BIO160 or BIO202)], or permission of Program Director.

### HIT214

### CPT Coding II

#### 2 credits 4 periods lecture + lab

In-depth exposure to CPT coding, reimbursement trends, guidelines, and coding from source documents. Application of current evaluation and management documentation guidelines. Emphasis on surgical procedures from a technical as well as a coding standpoint. Appropriate assignment of CPT and HCPCS Level II modifiers. **Prerequisites:** (HCC204 and HIT212), or permission of Program Director.

### HIT215

## Hospital-Based Medical Coding Seminar

### 0.5 credit 0.5 period lecture

Content and development of hospitalbased coding compliance programs. Forum for discussion of classroom, laboratory, and professional practice experience. **Prerequisites:** (HIT209, HIT211, and HIT214), or permission of Program Director. **Corequisite:** HIT216 or permission of Program Director.

### HIT216

# Professional Practice in Hospital-Based Coding

#### 1 credit 0.5 period lab

Practical application of coding guidelines for hospital-based medical coding. Use of International Classification of Diseases and Current Procedural Terminology systems to code services for hospital patients. **Prerequisites:** (HIT209, HIT211, and HIT214), or permission of Program Director. **Corequisite:** HIT215 or permission of Program Director.

## HIT217

## Health Information Seminar I 1 credit 1 period lecture

Theory of and practice in specialized health information activities. Forum for discussion of classroom, laboratory, and clinical affiliation experiences. **Prerequisites:** (HIT106, HIT150, HIT201, and HIT206), or permission of Program Director. **Corequisite:** HIT218 or permission of Program Director.

# HIT218

### Professional Practice 1 credit 5 periods lab

Practical application of acquired health information technical knowledge in health care settings. **Prerequisites**: (HIT106, HIT150, HIT201, and HIT206), or permission of Program Director. **Corequisite:** HIT217 or permission of Program Director.

### HIT219

### Health Information Systems 3 credits 5 periods lecture + lab

Overview of the fundamental concepts and terminology of health information systems with emphasis on computer systems for health information functions. Review of concepts influencing electronic and computerized patient records and automation of health information management functions. **Prerequisites:** (HIT150 and HIT206), or permission of instructor.

### HIT220

# Health Information Seminar II 1 credit 1 period lecture

Provides a forum for discussion of advanced clinical affiliation. Survey of current trends in health information management. Application of problem solving and research concepts to health information practices. **Prerequisites:** (HIT207, HIT217, HIT218, and HIT219), or permission of Program Director. **Corequisites:** HIT224 or permission of Program Director.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/ academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/ academic/curric/cs.php

### HIT224

## Advanced Professional Practice 1 credit 5 periods lab

Practical application of advanced health information knowledge in a variety of health-related settings. Focus on supervision and management, policies interdepartmental and procedures, budget and staffing considerations, as well as committee planning and preparation. Prerequisites: (HIT207, HIT217, HIT218, and HIT219), or permission of Program Director. Corequisites: HIT220 or permission of Program Director.

# HIT230

### Quality Improvement and Management 2 credits 2 periods 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:** (HIT206 and HIT219), or permission of instructor.

#### HIT298AA-AC Special Projects

# 1-3 credits 1-3 periods 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. Professionaltype 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.

# HUM- Film

# HUM/THE205

## Introduction to Cinema

3 credits 3 periods lecture

Survey of the history and development of the art of motion pictures, including criticism of aesthetic and technical elements. **Prerequisites:** None.

#### HUM/WST209 Women and Films

# 3 credits 3 periods lecture

Analysis of images of women in films from both historical and contemporary perspectives. **Prerequisites:** None.

#### HUM/THE210

#### Contemporary Cinema 3 credits 3 periods lecture

A study of contemporary films, directors, and critics with emphasis on evaluating films as an art form. **Prerequisites:** None.

## HUM211AA

# Foreign Films: Classics

### 3 credits 3 periods lecture

Analysis of contributions of foreign directors to the art and history of motion pictures through a study of selected films. **Prerequisites:** None.

### HUM212

#### Documentary Film 3 credits 3 periods 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 credits 3 periods lecture

Analysis of Hispanic film as art form and as social commentary. **Prerequisites:** None.

# **HUM- Humanities**

### HUM105AA

# Cultural Perspectives: African Ideas & Values

### 1 credit 1 period 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 1 period 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 & Values

## 1 credit 1 period 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 & Values

## 1 credit 1 period 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 & Values

#### 1 credit 1 period 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 credits 3 periods lecture

An exploration of human expression in contemporary arts and sciences. **Prerequisites:** None.

### HUM120

# Cultural Viewpoints in the Arts 3 credits 3 periods 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 credits 3 periods 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-AI Honors Forum 1 credit 1 period 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.

# HUM202

# Humanities: Universal Themes 3 credits 3 periods lecture The hero/heroine; fool; the social world,

and the future as themes in the humanities. **Prerequisites:** None.

# HUM203

# Humanities: The Intellectual Community/Ethics

# 3 credits 3 periods lecture

Presents ethical issues through readings from philosophy, literature, and performing or visual arts. Practice in the expository form as a means of mastering ethical ideas and their application in resolving conflict. **Prerequisites:** ENG101, or permission of instructor.

### HUM/THE206

### Introduction to Television Arts 3 credits 3 periods lecture

History and development of electronic media and its impact on popular arts. **Prerequisites:** None.

### HUM207

# Humanities: Biomedical Ethics 3 credits 3 periods lecture

Examines the ethical basis of solutions for biomedical issues through readings from philosophy and literature; consideration of contemporary, crosscultural, and historical case studies. **Prerequisites:** None.

### HUM208

# Arts and World Views of the Southwest 3 credits 3 periods 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 credits 3 periods lecture

Analysis of images of women in films from both historical and contemporary perspectives. **Prerequisites:** None.

### HUM250

### Ideas and Values in the Humanities 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Cultural, literary, and artistic expressions of Native, Hispanic, and African Americans. Includes traditional and modern work and contribution to American civilization. **Prerequisites:** None.

# **IBS – International Business**

### **IBS101**

## Introduction to International Business 3 credits 3 periods 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.

# IBS102

### International Marketing 2 credits 2 periods lecture

Focuses on how to plan and implement international marketing strategies through application of several concepts: international marketing research; market evaluation; cultural, economic, and political environments; product, price, promotion and distribution strategies; and implementation. **Prerequisites:** None.

# IFS – Information Literacy

### IFS101

# Information Skills in the Digital Age 3 credits 3 periods 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.

# **INT – Interior Design**

### INT105

Introduction to Interior Design 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 Architectural Desktop for Interior Design

## 3 credits 3 periods lecture + lab

Introduction to Architectural Desktop AutoCAD (tm) tools for the interior designer with emphasis on industryaccepted standards for interior design following American Institute of Architects (AIA) guidelines. **Prerequisites:** DFT121.

### INT145

# Drawing and Rendering 3 credits 6 periods 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:** DFT121.

# INT150

# Color and Design

**3 credits 6 periods 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 credits 3 periods 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.

# INT170

# Interior Materials

**3 credits 6 periods 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 credits 6 periods lecture + lab** Custom design for interiors. Creative problem solving using design theory and process. Visualization of concepts through sketching. **Prerequisites:** INT105 and DFT121.

# INT190 Space Planning

3 credits 6 periods lecture + lab

Study of creative, critical, analytical and strategic thinking as it relates to human behavior and the built environment. Emphasis on the design process and tasks within each phase of the process. Stresses creative expression through the utilization of design elements and principles. **Prerequisites:** INT105 and DFT121. INT140 or DFT105 recommended but not required.

# INT210

# Interior Sales and Marketing 3 credits 3 periods lecture

# (Not offered every semester)

Marketing procedures and sales techniques for interior designers. **Prerequisites:** Permission of instructor.

# INT240

# Kitchen and Bath Design

3 credits 6 periods 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 DFT105) or INT140.

# INT260AB

### ADA Compliance 1.5 credits 1.5 periods lecture (Not offered every semester)

Study of the interior designer's ability to affect people and the environment through barrier-free design concepts. Emphasis on how the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the seven principles of Universal Design impact the design of the interior environment. **Prerequisites:** AAS Degree in Interior Design or permission of department.

# INT260AC

### Interior Building Codes 1.5 credits 1.5 periods lecture (Not offered every semester)

Study of interior building codes, regulations, and standards and their impact on the health, safety, and welfare of the public. Emphasis on occupancy classifications, means of egress, fire protection, and finish plus furniture standards and testing. **Prerequisites:** AAS Degree in Interior Design or permission of department.

## INT265 Building Systems 3 credits 3 periods lecture (Not offered every semester)

Study of building systems and their impact on the health, safety and welfare of the public. **Prerequisites:** AAS Degree or permission of department.

### INT270

# Commercial Design

3 credits 6 periods lecture + lab (Not offered every semester)

Creation of design solutions for commercial spaces. Focuses on issues affecting the health, safety and welfare of the public. **Prerequisites:** AAS Degree or permission of instructor.

### INT271AA

### Interior Design Internship 1 credit 5 periods 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 credits 10 periods 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 credits 15 periods lab

Interior design work experience in the interiors industry. Required to work 240 hours. Supervised and evaluated by a faculty coordinator. **Prerequisites:** Departmental approval.

### INT274AA

Interior Design Study Tour 1 credit 5 periods lab INT274AB Interior Design Study Tour 2 credits 10 periods lab INT274AC Interior Design Study Tour 3 credits 15 periods 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.

## INT280 Design Business Procedures 3 credits 3 periods lecture (Not offered every semester)

Business procedures for the interiors industry including certification, professional practices and ethics. Emphasizes the use of a business plan and business processes used in studios. **Prerequisites:** INT190.

# IPP – Interpreter Preparation Program

Also see Sign Language, SLG, on page 316.

# IPP215 ASL to English Consecutive Interpreting

2 credits 3 periods lecture + lab 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.

### **IPP216**

# ASL to English Simultaneous Interpreting

3 credits 4 periods lecture + lab 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: IPP215 or permission of department/division.

## **IPP218**

English to ASL Consecutive Interpreting

## 2 credits 3 periods lecture + lab

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 credits 4 periods lecture + lab

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:** IPP218 or permission of department/division.

# IPP220

### Interactive Interpreting I 4 credits 5 periods lecture + lab

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.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### IPP221

### Interactive Interpreting II 3 credits 4 periods lecture + lab

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:** IPP220 or permission of department/division.

### IPP229

# Interpreter Preparation Internship Seminar

### 1 credit 1 period lecture

Classroom portion of the Interpreter Program internship. Preparation Emphasizes the blend of job-related activities including career exploration, employment application procedures, interpersonal skills, and on-the-job problems. May be repeated for a total of credits. **Prerequisites:** four (4)into Interpreter Acceptance the Preparation Program and/or program approval. **Corequisites:** director IPP230AA or IPP230AB or IPP230AC or IPP230AD.

### IPP230AA

## Interpreter Preparation Program Internship

### 1 credit 5 periods lab

Laboratory portion of the Interpreter Preparation Program seminar. Eighty (80) clock hours of work required. Practical experience in settings such as educational, rehabilitation, community service centers, and agencies serving children, adolescents, and/or adults who are deaf or hard of hearing. Designed to provide students with the opportunity to synthesize practical and academic experiences gained during the in-classroom portion of the program. Site, supervision, and plan of activity mutually agreed upon by the student and instructor. Capstone experience for AAS degree students. May be repeated for a total of four (4) credits. **Prerequisites:** Acceptance into the Interpreter Preparation Program and/or program director approval. Corequisites: IPP229.

## IPP230AB

# Interpreter Preparation Program Internship

# 2 credits 10 periods lab

Laboratory portion of the Interpreter Preparation Program Seminar. One hundred sixty (160) clock hours of work required. Practical experience in settings such as educational, rehabilitation, community service centers, and agencies serving children, adolescents and/or adults who are deaf or hard of hearing. Designed to provide students with the opportunity to synthesize practical and academic experiences gained during the in-classroom portion of the program. Site, supervision, and plan of activity mutually agreed upon by the student and instructor. Capstone experience for AAS degree students. May be repeated for a total of four (4) credits. Prerequisites: Acceptance into the Interpreter Preparation Program and/or program director approval. Corequisites: IPP229.

### IPP230AC

# Interpreter Preparation Program Internship

## 3 credits 15 periods lab

Laboratory portion of the Interpreter Preparation Program Seminar. Two hundred forty (240) clock hours of work required. Practical experience in settings such as educational, rehabilitation, community service centers, and agencies serving children, adolescents and/or adults who are deaf or hard of hearing. Designed to provide students with the opportunity to synthesize practical and academic experiences gained during the in-classroom portion of the program. Site, supervision, and plan of activity mutually agreed upon by the student and instructor. Capstone experience for AAS degree students. Prerequisites: Acceptance into the Interpreter Preparation Program and/or program director approval. Corequisites: IPP229.

# For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/ academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/ academic/curric/cs.php

### IPP230AD Interpreter Preparation Program Internship

### 4 credits 20 periods lab

Laboratory portion of the Interpreter Preparation Program Seminar. Three hundred twenty (320) clock hours of work required. Practical experience in settings such as educational, rehabilitation, community service centers, and agencies serving children, adolescents and/or adults who are deaf or hard of hearing. Designed to provide students with the opportunity to synthesize practical and academic experiences gained during the inclassroom portion of the program. Site, supervision, and plan of activity mutually agreed upon by the student and instructor. Capstone experience for AAS degree students. Prerequisites: Acceptance into the Interpreter Preparation Program and/or program director approval. Corequisites: IPP229.

# ITA- Italian

## ITA101

# Elementary Italian I

# 4 credits 4 periods 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

# Elementary Italian II

4 credits 4 periods 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 credits 3 periods 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.

### ITA116

### Beginning Italian Conversation II 3 credits 3 periods lecture

Continued development of speaking and listening skills for effective communication in Italian. **Prerequisites:** ITA115 or equivalent or departmental approval.

### ITA201 Intermediate Italian I 4 credits 4 periods 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

# Intermediate Italian II

**4 credits 4 periods 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 credits 3 periods 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 credits 3 periods 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.

# ITS – Information Technology Security

### ITS100

# Information Security Awareness 2 credits 2 periods lecture

Computer and network security topics, including network communication. Includes security policy, implementation of basic security measures, the importance of backups and the value of protecting intellectual property. Real-life examples and practical projects to reinforce the need for computer security. **Prerequisites:** None.

### ITS110 Information Security Fundamentals 4 credits 5 periods lecture + lab

Fundamental concepts of information technology security. Topics include authentication methods, access control, cryptography, Public Key Infrastructure (PKI), network attack and defense methods, hardening of operating systems and network devices, securing remote access and wireless technologies and securing infrastructures and topologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and Microsoft (MS) Windows and Linux Administration. Prerequisites: (CIS126DA or CIS126DL) and (CNT150 and MST150DA or MST150XP), or permission of instructor.

## ITS120

### Legal, Ethical and Regulatory Issues 3 credits 3 periods lecture

Exploration of legal and ethical issues unique to information security. Analysis of professional ethical codes and their application to information security practitioners. Federal and state laws as they relate to information security. **Prerequisites:** ITS110 or permission of instructor.

# ITS130

# **Operating System Security**

3 credits 4 periods lecture + lab In-depth examination of operating system security including Transmission Control Protocol/Data Encryption Standard (DES), Triple Data Encryption Standard (3DES), Advanced Encryption Standard (AES), Pretty Good Privacy (PGP), and other encryption technologies (TCP/IP), Internet Protocol Security (IPSec) and Cisco Internetwork Operating System (IOS), Microsoft Windows, Linux and Mac OSX Security. Procedures to defend networks against attacks and recovery from network disasters. Web server security. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and MS Windows and Linux Administration. Prerequisites: ITS110 or permission of instructor.

# ITS140

# Network Security

3 credits 4 periods lecture + lab

Examination of techniques used to defend network security. Design and implementation of devices including firewalls and Intrusion Detection Systems (IDSs) and Virtual Private Networks (VPNs). Risk analysis and security policies methodologies. Emphasis on hands-on labs in both the Windows and Linux environments. Builds on thorough understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) and security concepts and MS Windows and Linux Administration. Prerequisites: (ITS110 and ITS130) or permission of instructor.

## ITS170

# Information Security Policy Development

## 1 credit 1 period lecture

Components required to plan, develop and write information security policies. Policy development processes and the relationship between security and policy directions. Emphasis on writing effective information security policies in a governmental or corporate setting. **Prerequisites:** None.

### ITS172

### Viruses and Other Malicious Software 1 credit 2 periods lecture + lab

Spyware, adware, viruses, worms and trojans. Available tools for identifying and removing malicious software. Techniques for analyzing the behavior of malicious software. Methods of infection and prevention of infection. **Prerequisites:** None.

# **JAS – Justice Agencies Support**

# **JAS101**

# Introduction to Justice & Government Agency Administration

3 credits 3 periods 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 & Government Agencies I 3 credits 3 periods 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 credits 3 periods 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.

### **JAS115**

### Basic Principles of Human Resources Management for Justice and Government Agencies 3 credits 3 periods lecture

Overview of human resources management in government. Includes discussion of planning, staffing, training, compensating, and appraising. **Prerequisites:** JAS101 or permission of instructor.

## **JAS150**

### Organizational Behavior in Justice & Government Agencies 3 credits 3 periods 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:** JAS101 or permission of instructor.

### **JAS200**

### Principles of Management for Justice & Government Agencies II 3 credits 3 periods lecture

Elaboration of effective practices for managing employees in government. **Prerequisites:** JAS102 or permission of instructor.

### JAS225

# Statistics for Social Research/Justice & Government

### 3 credits 3 periods 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:** MAT102 or completion of higher level mathematics course.

### **JAS250**

### Managing Individuals in Groups for Justice & Government Agencies 3 credits 3 periods lecture

Advanced management practices focusing on the manager as a work group leader in justice and government agencies. **Prerequisites:** JAS102 or permission of instructor.

# JPN – Japanese

### **JPN115**

## Beginning Japanese Conversation I 3 credits 3 periods 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.

### **JPN116**

### Beginning Japanese Conversation II 3 credits 3 periods 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:** JPN115.

# LAS – Legal Assisting

### LAS100

# Introduction to Paralegalism

**1 credit 1 period lecture** Focus on the role, responsibilities, and ethical standards of a legal assistant/paralegal. Provides an overview of the legal system and the role of the legal assistant in the legal system. Emphasis on professional development and job-search strategies. **Prerequisites:** None.

# LAS101 Introduction to Law

### **3 credits 3 periods 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,

agencies. Development of a case for trial, adjudication, and post-verdict procedures in the civil and criminal systems. **Prerequisites:** None. Suggested but not required: ENG101 and CRE101 or exemption by score on the reading placement test (ASSET).

## LAS109

### Legal Procedures I 3 credits 3 periods lecture

Pretrial 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 or Corequisites**: LAS101 and (BPC110 or permission of department chair or program director.)

# LAS110

# Legal Procedures II

# 3 credits 3 periods lecture

Application of the procedural aspects of discovery, trial preparation, and posttrial 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).

### LAS115

### Criminal Trial Procedure 3 credits 3 periods 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:** LAS101 or permission of department chair, or program director. **Prerequisites or Corequisites:** BPC110 or permission of department chair or program director.

### LAS131

# Legal Writing I

## 3 credits 3 periods 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 wellwritten 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 credits 3 periods 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 Business Law For Legal Assistants 3 credits 3 periods lecture

**NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

Examination of legal contracts and contracts regulated by the Uniform Commercial Code (Sales Contracts and Secured Transactions); examination of business organizations including Sole Proprietorships, Partnerships, Corporations, and Limited Liability Companies. Includes drafting of contracts and documents used in the formation and operation of business organizations. Prerequisites or Corequisites: LAS109 and (BPC110 or permission of department chair or program director).

### LAS208 Probate

### 3 credits 3 periods 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 credits 3 periods 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

### Insurance and Tort Law 3 credits 3 periods 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).

### LAS216

### Real Estate Transactions 3 credits 3 periods 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 credits 3 periods 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 credits 3 per lecture

fundamental Introduction to 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

### Legal Assisting Internship Seminar 1 credit 1 period lecture

**NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

Coordinates on-the-job experiences with interpersonal relations, communications, time-management, and caseskills. management Provides opportunity to discuss problems encountered during internship. Prerequisites: LAS203 and LAS211 and (LAS204 or LAS212), and (BPC110 or permission of department chair or director). **Corequisites:** program LAS221AA or LAS221AB or LAS221AC.

### LAS221AA

## Legal Assisting Internship 1 credits 5 periods lab

**NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

Laboratory portion of LAS220, Legal Assisting Internship Seminar; 80 hours of work. Supervision and evaluation by onthe-job supervisor as well as college coordinator. May be repeated for a total of three (3) credit hours. **Prerequisites:** Permission of department chairperson or program director/coordinator. **Corequisites:** LAS220.

### LAS221AB

### Legal Assisting Internship 2 credits 10 periods lab

**NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

Laboratory portion of LAS220, Legal Assisting Internship Seminar; 160 hours of work. Supervision and evaluation by on-the-job supervisor as well as college coordinator. May be repeated for a total of four (4) credit hours. **Prerequisites:** Permission of department chairperson or program director/coordinator. **Corequisites:** LAS220.

### LAS221AC

### Legal Assisting Internship 3 credits 15 periods lab

**NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

Laboratory portion of LAS220, Legal Assisting Internship Seminar; 240 hours of work. Supervision and evaluation by on-the-job supervisor as well as college coordinator. May be repeated for a total of six (6) credit hours. **Prerequisites:** Permission of department chairperson or program director/coordinator. **Corequisites:** LAS220.

### LAS225

# Legal Research, Analysis, and Writing 3 credits 3 periods 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

# Computerized Law Office & Litigation Support

# 3 credits 3 periods lecture

Word processing skills for the law office; use of presentation software;. types and comparisons of litigation support systems; types and uses of electronic trial software; coding schemes; management of integrated litigation support system. Fee arrangements; the billing cycle; billing procedures; management of billing activities. Management of names, matters, and events; indexing structures; reports; ethical issues. **Prerequisites:** LAS110 and (BPC110 or equivalent or permission of department chair or program director).

### LAS237

### Legal Interviewing, Investigation, and Report Writing

### 3 credits 3 periods 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 credits 3 periods lecture

Examination of bankruptcy laws and procedures and the role of paralegals in bankruptcy practice, including the commencement of a case, preparation of schedules, review of adversary matters and litigation, debtors' and creditors' rights and obligations. **Prerequisites:** LAS109 and (BPC110 or permission of department chair or program director).

### LAS295AA

### Special Topics in Civil Law 1 credit 1 period lecture

Explores special topics related to the practice of civil law. Focuses on substantive and procedural aspects. May be repeated for a total of two (2) credits. **Prerequisites:** Completion of Legal Assisting degree or certificate, or permission of department.

### LAS295BA

## Special Topics in Criminal Law 1 credit 1 period lecture

Explores special topics related to the practice of criminal law. Focuses on substantive and procedural aspects. May be repeated for a total of two (2) credits. **Prerequisites:** Completion of Legal Assisting degree or certificate, or permission of department.

### LAS295CA

# Special Topics in Administrative Law 1 credit 1 period lecture

Explores special topics related to the practice of administrative law. Focuses on substantive and procedural aspects. May be repeated for a total of two (2) credits. **Prerequisites:** Completion of Legal Assisting degree or certificate, or permission of department.

### LAS295DA

### Special Topics in Current Legal Issues 1 credit 1 period lecture

Explores special topics related to the practice of law. Focuses on substantive and procedural aspects. May be repeated for a total of two (2) credits. **Prerequisites:** Completion of Legal Assisting degree or certificate, or permission of department.

# LAT – Latin

# LAT101 Elementary Latin I

#### 4 credits 4 periods lecture

Introduction to the basic grammar and vocabulary of the Latin language. Practice reading and translating Latin into English. **Prerequisites:** None.

### LAT102

### Elementary Latin II 4 credits 4 periods lecture

Comparative study of English and Latin grammar. Emphasis on analytical thinking, memorization, and familiarization with new terminology. Translation from English and from original works in Latin. **Prerequisites:** LAT101 or permission of instructor.

### LAT201

### Intermediate Latin I 4 credits 4 periods lecture

Introduction to translation technics using selections from various authors; emphasis on use of primary texts. **Prerequisites:** LAT102.

## Intermediate Latin II

# 4 credits 4 periods lecture

Refinement of translation technics using selections from Virgil's Æneid; emphasis on use of language and meter. **Prerequisites:** LAT201.

# LBS – Library Skills

### LBS101

### Library Resource Concepts & Skills 2 credits 2 periods 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 & Skills 1 credit 1 period 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.

# MAT – Mathematics

The following courses require a graphing calculator: MAT090, MAT091, MAT120, MAT150, MAT151, MAT156, MAT157, MAT172, MAT182, MAT187, MAT206, MAT212, MAT220, MAT225, MAT230, MAT240, and MAT261.

### **MAT065**

# Graphing Calculator

1 credit 1 period lecture

Computations, graphing, matrices, and elementary programming using a graphing calculator. **Prerequisites:** None.

### **MAT066**

### Overcoming Math Anxiety 1 credit 1 period lecture

Designed for students who avoid mathematics courses and/or who have experienced anxiety in mathematics courses. Includes definition and effects of math anxiety. Emphasis on study skills and test-taking strategies. **Prerequisites or Corequisites:** Enrollment in another math course or permission of instructor.

## MAT082 Basic Arithmetic 3 credits 3 periods 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.

### **MAT083**

### Arithmetic Review Expanded 5 credits 5 periods lecture

Additional review of basic arithmetic skills. Fundamental operations with whole numbers, common fractions, topics include math anxiety reduction techniques, study skills, and test-taking strategies. **Prerequisites:** None.

### **MAT090**

### Developmental Algebra 5 credits 5 periods 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.

### MAT091

### Introductory Algebra 4 credits 4 periods 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 credits 3 periods 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.

### MAT120

# Intermediate Algebra

# 5 credits 5 periods 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 credits 3 periods lecture

Working knowledge of college-level mathematics and its applications to reallife 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.

### **MAT150**

### College Algebra/Functions 5 credits 5 periods lecture

Analysis and interpretation of the behavior and nature of functions including polynomial, rational, exponential, power, logarithmic, 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 or MAT121 or MAT122 or equivalent, or satisfactory score on District placement exam. Course Note: May receive credit for only one of the following: MAT150, MAT151, MAT152, or MAT187.

### **MAT151**

### College Algebra/Functions 4 credits 4 periods 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 credits 3 periods 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 credits 3 periods 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.

#### MAT172

# Finite Mathematics

3 credits 3 periods lecture

An introduction to the mathematics required for the study of social and behavioral Includes sciences. combinatorics, probability, descriptive statistics, matrix algebra, linear programming and the mathematics of finance. Includes applications of problem-solving. technology in Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or MAT187 or equivalent, or satisfactory score on District placement exam.

# MAT182 Plane Trigonometry 3 credits 3 periods lecture

A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, trigonometric functions, inverse 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.

### MAT187 Precalculus

# 5 credits 5 periods 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 credits 3 periods lecture

Basic concepts and applications of statistics, including data description, estimation and hypothesis tests. **Prerequisites:** Grade of "C" or better in MAT150 or MAT151 or MAT152 or equivalent or satisfactory score on District placement exam.

# MAT212

### Brief Calculus 3 credits 3 periods lecture

Introduction to the theory, techniques and applications of the differential and integral calculus of elementary 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 equivalent, or satisfactory score on District placement exam.

# MAT220

### Analytic Geometry and Calculus I 5 credits 5 periods lecture

Topics from analytic geometry with special emphasis on inequalities and absolute value expressions, limits, continuity, the fundamental principles and formulae for differential and integral calculus along with their applications to geometry and mechanics, the mean value theorems and the fundamental theorem of calculus. May receive credit for only one of the following: MAT220 and MAT221. Prerequisites: Grade of "C" or better in (MAT150 or MAT151 or MAT152) and MAT182 or MAT187 or equivalent, or satisfactory score on District placement exam.

### **MAT225**

# Elementary Linear Algebra 3 credits 3 periods 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**

### Analytic Geometry and Calculus II 5 credits 5 periods lecture

Continuation of MAT220 including work on the elementary transcendental functions, techniques of integration, vector functions, and infinite series. May receive credit for only one of the following: MAT230 or MAT231. **Prerequisites:** Grade of 'C' or better in MAT220 or MAT221 or equivalent.

### **MAT240**

### Calculus with Analytic Geometry III 5 credits 5 periods lecture

Vector-valued functions of several variables, multiple integration, introduction to vector analysis. **Prerequisites:** Grade of "C" or better in MAT230 or MAT231.

### **MAT261**

# Differential Equations

# 4 credits 4 periods lecture

Ordinary differential equations with applications including Laplace transforms with numerical methods. **Prerequisites:** Grade of "C" or better in MAT230, or MAT231, or equivalent.

# MHL/MTC/MUC/MUP – Music

### **MHL140**

# Survey of Music History

3 credits 3 periods lecture

Study of composers, compositions, styles, and periods in music history. **Prerequisites:** None.

## **MHL143**

# Music in World Cultures

3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

### **MHL147**

### Music of African-American Cultures 3 credits 3 periods lecture

African-American music traced from its origin in Africa to the present. Includes spirituals, blues, gospel, jazz, and classical styles. **Prerequisites:** None.

### **MHL153**

# Rock Music and Culture 3 credits 3 periods lecture

History of Rock music and how cultural, social, political, and economic conditions have shaped its evolution. **Prerequisites:** None.

### MTC101

# Introduction to Music Theory 3 credits 3 periods 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 credits 2 periods 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 credits 3 periods 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 2 periods lecture + lab

The development of listening and performing skills through dictation, sight singing and keyboard harmony. **Prerequisites:** None. **Corequisite:** MTC105.

## **MTC155**

# Music Theory II

**3 credits 3 periods lecture** A continuation of Music Theory I with emphasis on harmony and part-writing procedures. **Prerequisites:** MTC105. **Corequisites:** MTC156.

### **MTC156**

# Aural Perception II

**1 credit 2 periods lecture + lab** A continuation of Aural Perception I, including harmonic practices. **Prerequisites:** None. **Corequisites:** MTC155.

## MTC190

#### Computer-Aided Music Notation 3 credits 4 periods 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.

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## MTC191

# Electronic Music I

3 credits 4 periods 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 credits 4 periods 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.

# **MTC205**

# Music Theory III

### 3 credits 3 periods lecture

The study of chromatic harmony and melody, modulation techniques and expanded chords. The analysis of formal structure. **Prerequisites:** MTC155. **Corequisites:** MTC206.

## MTC206

# Aural Perception III

# 1 credit 2 periods lecture + lab

A development of listening and performing skills, including an introduction of chromatic harmonic techniques and concepts of style. **Prerequisites:** None. **Corequisites:** MTC205.

## MTC255

# Music Theory IV

# 3 credits 3 periods lecture

A continuation of Music Theory III, including 20th century theories and techniques. **Prerequisites:** MTC205. **Corequisites:** MTC256.

# MTC256

# Aural Perception IV

1 credit 2 periods lecture + lab A continuation of Aural Perception III, including extended chords. Prerequisites: None. Corequisites: MTC255. **Course Descriptions** 

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### **MUC109**

# Music Business: Merchandising & the Law

### 3 credits 3 periods 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 credits 3 periods 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.

### **MUC195**

# Studio Music Recording I

**3 credits 5 periods 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.

### **MUC196**

# Studio Music Recording II

**3 credits 5 periods 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.

### MUC295

### Studio Music Recording III 3 credits 6 periods 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 1 period lecture

Career goal development. Includes selfpresentation and communication skills, keeping files and records, and developing self-promotional materials. **Prerequisites:** None.

# MUC295AB

### Portfolio for Music 1 credit 1 period lecture

Includes developing a portfolio that demonstrates music related skills and marketing of songs, recordings, and musical performances. **Prerequisites:** MUC295AA.

# MUC297AB Music Internship 2 credits 2 periods lecture + lab

Music Internship work experience in a business or industry. Eighty (80) hours of designated work per credit totaling 160 hours per semester. A maximum of 12 credits allowed. **Prerequisites:** Departmental approval.

## MUP101, MUP151, MUP201, MUP251 Private Instruction

# 1 credit 0.6 periods lecture + lab

Instruction emphasizing Private improvement of developmental 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 credits 1.2 periods 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 0.5 period 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture + lab

Continuation of Class Voice I including the elements of stage presence and diction. **Prerequisites:** MUP133 or permission of instructor.

### **MUP153**

### A Cappella Choir

### 2 credits 5 periods lecture + lab

A mixed choir designed to emphasize choral techniques and performance of all styles of choral literature. Public performances are scheduled during the year including a concert tour. Auditions may be required. May be repeated for credit. **Prerequisites:** None.

# **MUP155**

### Handbell Choir (Bell Canto) 1 credit 3 periods lecture + lab

Emphasis on practical and performing skills in bell ringing. Preparation of all styles of bell literature. Scheduled public performances during the year. **Course Note:** May be repeated for credit. **Prerequisites:** None.

### **MUP157**

# Women's Chorus

**1 credit 3 periods lecture + lab** A women's chorus designed

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 credits 5 periods 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 3 periods 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 credits 5 periods 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 3 periods 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 credits 2 periods 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 credits 3 periods 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.

# MUP181

### Chamber Music Ensembles 1 credit 2 periods lecture + lab

Practical and performance experience in instrumental, vocal, and mixed ensembles. May be repeated for credit. **Prerequisites:** None.

# MUP182

# Chamber Singers

**1 credit 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture + lab Additional fingerboard positions. Ensemble techniques and performance. Prerequisites: MUP226 or permission of

# instructor. MUP228

# Class Guitar IV

# 2 credits 3 periods lecture + lab

Advanced fingerboard positions. Duet and trio performances. Advanced ensemble techniques. **Prerequisites:** MUP227 or permission of instructor.

# **MUP231**

# Class Piano III

# 2 credits 3 periods lecture + lab

Development of intermediate piano techniques including selected solo literature, transposition of harmonic patterns, and secondary dominants. **Prerequisites:** MUP132 or permission of instructor.

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# **MUP232**

# Class Piano IV

# 2 credits 3 periods 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 credits 3 periods lecture + lab

Interpretive singing through a closer examination of coloring, tone production, dynamics, and tempo indications. **Prerequisites:** MUP134.

## **MUP234**

### **Class Voice IV**

### 2 credits 3 periods lecture + lab

Continuation of Class Voice III with additional 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.

# MGT - Management

### **MGT105**

### Leadership for Citizenship 1 credit 1 period lecture

Characteristics and types of leaders, responsibilities of leadership, and ethics of leadership as related to citizenship. **Prerequisites:** None.

# **MGT119**

# Introduction to Credit Unions

# 3 credits 3 periods 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 credits 3 periods 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 credits 2 periods 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 credits 3 periods 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 credits 3 periods lecture

Covers management concepts and applications for business, industry, and government organizations. Prerequisites: None.

#### **MGT230**

### Management and Leadership II 3 credits 3 periods lecture

Includes practical applications of activities, issues and problems related to current managerial and supervisory skills and talents. Prerequisites: MGT229 or departmental approval.

### **MGT250**

### **Credit Union Financial Management** 3 credits 3 periods lecture

Introduction and examination of credit accounting and financial union 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 credits 3 periods 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 credits 3 periods 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 1 period 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 credits 15 periods 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 credits 3 periods lecture

Human resource planning, staffing, training, compensating, and appraising in employees labor-management relationships. Prerequisites: None. MGT101, or MGT175, or MGT229 suggested but not required.

### **MGT277**

## Labor Relations

### 3 credits 3 periods 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.

# MIS – Military Science

### **MIS101**

### Introduction to the Military I 3 credits 5 periods 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.

### **MIS102**

### Introduction to the Military II 3 credits 5 periods lecture & lab (Spring only)

Introduces problem-solving methods, critical thinking, decision-making, and group cohesion as applied in a military environment. Prerequisites: MIS101.

### **MIS201**

### Introduction to Leadership Dynamics I 3 credits 5 periods 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 credits 5 periods lecture & lab (Spring only)

Introduces interpersonal dynamics involved in military team operations, theory and application of military leadership principles. Prerequisites: MIS201.

### **MIS294**

#### **Ranger Fitness**

### 1 credit 3 periods lecture + lab

Beginning instruction in adapted physical activities and a variety of sports: golf, scuba, karate, judo, handball, equitation, tennis, swimming, weight training, gymnastics and other activities. May be repeated for credits. Prerequisites: Must be concurrently enrolled in MIS101, or MIS102, or MIS201, or MIS202.

# MKT - Marketing

### MKT/TEC109

# Introduction to Fashion Merchandising 3 credits 3 periods 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 credits 4 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

#### **MKT268**

### Merchandising

### 3 credits 3 periods lecture

Surveys structure and operation of retail organizations. Emphasizes merchandising to include price, location, time promotion and quantity. **Prerequisites:** None. MKT271 suggested but not required.

### MKT271 Principles of Marketing 3 credits 3 periods 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/TEC274AA

### Fashion Merchandising Study Tour 1 credits 5 periods 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.

### MKT/TEC274AB

# Fashion Merchandising Study Tour 2 credits 10 periods 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.

### MKT/TEC274AC

### Fashion Merchandising Study Tour 3 credits 15 periods 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 credits 3 periods 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 credits 6 periods 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 credits 6 periods lecture + lab

Basic concepts of 3-D modeling. Anatomy of computer geometry; basic elements that make computer modelscurves, 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 credits 6 periods lecture + lab

Print vocabulary, relationships, and typographic style for HTML and World Wide Web publication. Discussion of color, proportion, and design emphasis. Producing Web sites using HyperText Markup Language (HTML), digital text, and graphics to produce artistic form and content for the Web. **Prerequisites:** ART180AB or ART180AC or ART180AE or permission of instructor.

### MMT/VPT216

### Multimedia Project Management 3 credits 6 periods lecture + lab

Interactive video and multimedia project including management 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.

### MMT/ADA/ART284 Intermedia Animation 3 credits 6 periods lecture + lab Elements of electronic animation with

Elements of electronic animation with interactive text graphics, photography, sound, film, and video construction. **Prerequisites:** ADA/ART/MMT184 or permission of instructor.

### MMT/CIS/ELT292

# Multimedia Update

1 credit 2 periods 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 and CIS141, any module), or permission of instructor.

# MST – Microsoft Technology

### MST140

### Microsoft Networking Essentials 3 credits 4 periods lecture + lab

Emphasis on local area network with overview of wide area networks. Includes terminology, hardware and software components, connectivity, network architecture, packet structure, topologies, communication standards and protocols, and security issues. Preparation for Microsoft certification examination. **Prerequisites:** None. (BPC110 or CIS105, and BPC121AB suggested but not required.)

### **MST150**

### Microsoft Windows Professional 3 credits 4 periods lecture + lab

Knowledge and skills necessary to perform day-to-day administration tasks in a Microsoft Windows-based network. Preparation for Microsoft certification examination. **Prerequisites:** None. CIS190, or CNT140, or MST140 suggested but not required.

### MST152

### Microsoft Windows Server 4 credits 5 periods lecture + lab

Knowledge and skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Windows Server. Preparation for Microsoft certification examination. **Prerequisites** or **Corequisites:** Any MST150 course or permission of instructor.

### MST152DB

### Microsoft Windows 2003 Server 4 credits 5 periods lecture + lab

Knowledge and skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Microsoft Windows 2003 Server. Preparation for Microsoft certification examination. **Prerequisites** or **Corequisites:** Any MST150 course or permission of instructor.

#### MST155

### Implementing Windows Network Infrastructure

### 3 credits 4 periods lecture + lab

Knowledge and skills to install, configure, maintain, and support a Microsoft Windows network infrastructure. Preparation for Microsoft certification examination. **Prerequisites or Corequisites:** Any MST152 course or permission of instructor.

## **MST232**

### Managing a Windows Network Environment

**3 credits 4 periods lecture + lab** Knowledge and skills necessary to administer Windows network operating systems. Preparation for Microsoft certification examination. **Prerequisites:** MST140, MST150, and MST152, or permission of instructor.

# NAV – Navajo

### NAV101

### Elementary Navajo I 4 credits 4 periods 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.

### NAV115

### Beginning Navajo Conversation I 3 credits 3 periods lecture

Beginning conversational Navajo. Focuses on basic sentence structure, pronunciation, and vocabulary. Develops basic speaking, reading, writing skills in the Navajo language. **Prerequisites:** None.

### **NAV116**

### Beginning Navajo Conversation II 3 credits 3 periods 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.

### NAV225

### Intermediate Navajo Conversation I 3 credits 3 periods 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 credits 3 periods 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

# NUR156 Nurse Assisting

# 2 credits 2 periods lecture

Role of the nursing assistant for clients across the wellness/illness continuum within the nurse assisting scope of practice. Introduction to problem solving process specific to meeting the basic and holistic needs of clients. Professional communication skills essential for the nursing assistant. Nursing interventions to ensure the needs and safety of the client. Specific types of diseases, conditions and alterations in behavior of the client. Principles of nutrition and fluid balance. Special needs of the elder client in the acute and long-term care settings. Basic emergency care skills and procedures. Prerequisites or Corequisites: [HCC130 or (HCC130AA, HCC130AB, HCC130AC, HCC130AD, HCC130AE, and HCC130AF)] and HCC145AA, or equivalent. Corequisites: NUR157. Course Notes: NUR156 and NUR157 must be successfully completed concurrently to meet program requirements.

### NUR157

### Nurse Assisting Lab 2 credits 6 periods lab

Demonstration of problem solving, professional behavior and therapeutic communication skills. Demonstration of behaviors caring and ensuring environmental safety for the client. Provides opportunity for the development of clinical competency in the performance of selected nursing assisting skills and procedures through participation in the care of clients. Prerequisites: Completed Health and Safety Documentation Checklist (Proof of immunity or immunizations for Rubella, Rubeola, Mumps, Varicella, Hepatitis B, current TB testing, and current Health Care Provider CPR card) and completed Health Declaration form. Corequisites: NUR156. Course Notes: NUR156 and NUR157 must be successfully completed concurrently to meet program requirements.

## Nursing Process/Critical Thinking I 3 credits 3 periods lecture

Overview of nursing concepts and theories focusing on meeting basic human needs across the life span based on the wellness/illness continuum within the practical nurse scope of practice. Theoretical concepts focus on care of the well client, elder client, and clients with selected alterations in health and psychological/mental health disorders. Emphasis on the role of the practical nurse in the nursing care plan utilizing established nursing diagnoses. Focus on the development of the critical thinking process related to nursing care of clients in acute care and community settings. Prerequisites: Admission into the nursing program. Corequisites: NUR169 or permission of Nursing Department chairperson. Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

### **NUR163**

### Health Assessment/Health Promotion I 1 credit 3 periods lab

Emphasis on basic health assessment and history skills and promotion of wellness by using holistic nursing assessments for clients. Includes use of healthy life style strategies and primary prevention. **Prerequisites:** Admission into the nursing program. **NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

## NUR167

### Pharmacology & Medication Administration I 1 credit 3 periods lab

Provides basic pharmacology knowledge and skills to administer medications. Emphasis placed on developing the role of the nurse using critical thinking skills for safe practice in the administration of medications. **Prerequisites:** Admission into the nursing program.

# NUR169 Nursing Science I 3 credits 9 periods lab

Development of clinical competency in the performance of selected nursing skills and procedures. Provides for participation in the care of clients experiencing problems of alteration in health and selected mental health disorders. Provides for clinical practice experiences with individuals and families in a variety of acute and community settings. Application of holistic nursing concepts and theories related to health promotion, disease/illness prevention, and health restoration of individuals. Prerequisites: Admission into the nursing program. Corequisites: NUR161 or permission of Nursing Department chairperson. Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed to concurrently meet program requirements.

### **NUR181**

### Nursing Process/Critical Thinking II 3 credits 3 periods lecture

Focus on nursing concepts and theories to meet basic human needs across the life span based on the wellness/illness continuum. Emphasis on the nursing process related to pediatric and adult clients with selected alterations in health. Introduction to care of the well childbearing client and childbearing family. Continuation of the role of the practical nurse in planning nursing care and applying established nursing diagnoses for clients. Emphasis on the utilization of critical thinking processes related to nursing care of clients in acute care and community settings. **Prereauisites:** NUR161. NUR163. NUR169, and (HCR240 or HCR240AA). Corequisites: NUR189 or permission of Nursing Department chairperson. Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

### For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### NUR185

### Developing the Nurse's Role I 1 credit 1 period lecture

Overview of roles in nursing with emphasis on transition from nursing assistant to practical nurse. Includes introduction of the core values of the MCCD nursing programs, nursing history, standards, and scope of practice. Introduces concepts and skills required of the practical nurse, and application of communication techniques and delegation to teamwork and leadership. Prerequisites: NUR161, NUR163, NUR167, NUR169, and admission into the nursing program.

#### **NUR187**

# Pharmacology & Medication Administration II

### 1.5 credits 1.5 periods lecture

Overview of selected drug classifications and groupings. Emphasis on principles of drug metabolism and effects, interactions and adverse reactions, and nursing implications for safe practice. **Prerequisites:** (HCR240 or HCR240AA), NUR161, NUR163, NUR167 and NUR169. **NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

### NUR189

Nursing Science II

4 credits 12 periods lab

Continued application of holistic nursing concepts and theories related to health promotion, disease/illness prevention and health restoration of individual and families. Provides continued opportunity for the development of clinical competency in the performance of selected nursing skills, participation in the care of clients across the life span including clients with alterations in health. Provides experiences with individuals, families, and small groups of clients in a variety of acute care, and community settings. Application of nursing concepts and theories related to the development of care plans, client teaching, and discharge planning. Prerequisites: NUR161, NUR163. NUR169, and (HCR240 or HCR240AA). Corequisites: NUR181 or permission of Nursing Department chairperson. Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

### NUR261

# Nursing Process/Critical Thinking III

# 3 credits 3 periods lecture

Focus on nursing concepts and theories to meet complex human needs across the life span based on the wellness/illness continuum in a variety of acute care and community settings. Emphasis on utilizing critical thinking skills to plan holistic care through the nursing process for groups of clients with selected acute and chronic alterations in health and psychiatric/mental health disorders. Prerequisites: NUR181, NUR185. NUR187, NUR189, (HCR240 or HCR240AB) or Integrated Competency Assessment Network (ICAN) placement. Corequisites: NUR269 or permission of Nursing Department chairperson. Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

## NUR263

Health Assessment & Health Promotion II

### 1 credit 3 periods lab

Use of advanced, specialized, and holistic assessments to restore optimal wellness for clients across the life span. Emphasis on active involvement and use of resources, risk reduction, prevention, and education strategies and programs for specific communities. **Prerequisites:** NUR163 or ICAN placement. *NOTE: Course changes not available at time of printing. Consult with Academic Advisement.* 

### NUR267

## Pharmacology and Medication Administration III

1 credit 2 periods lecture + lab

Provides the knowledge and skills to and administer safely prepare intravenous medications and solutions. Emphasizes management of clients receiving complex therapies such as blood and blood products, parenteral nutrition, and pain management. Includes an overview of medications used in emergency and critical care situations across the lifespan. Emphasis on pharmacokinetics, safe preparation and administration, monitoring, and documentation of client responses. Prerequisites: (NUR187, or NCE214OP), or Integrated Competency Assessment Network (ICAN) placement. NOTE: Course changes not available at time of printing. Consult with Academic Advisement.

## NUR269 Nursing Science III

# Nursing Science III 5 credits 15 periods lab

Application of critical thinking skills through the nursing process to clients and families with acute alterations in health and psychiatric/mental health disorders. Provides for the development of clinical and cultural competency and the continued development of selected nursing skills and procedures within the scope of the professional nurse. Holistic care of clients, families, and small groups in a variety of acute and community health care settings. Application of professional nursing concepts and theories related health to education/promotion for clients. families and small groups. Prerequisites: NUR181, NUR185, NUR187, NUR189, (HCR240 or HCR240AB or NCE214OP), or Integrated Competency Assessment (ICAN) Network placement. Corequisites: NUR261 or permission of Department chairperson. Nursing Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

### NUR281

### Nursing Process & Critical Thinking IV 3 credits 3 periods lecture

Emphasis on nursing concepts and theories to meet complex needs of the critically ill and high-risk clients with multiple system alterations in health. Includes high risk perinatal, pediatric, and adult clients in acute care and community settings. Focus on application of critical thinking skills to modify a holistic plan of care. Highlights the role of the professional nurse in health education/promotion, illness prevention and restorative care. Prerequisites: (NUR261, NUR263, NUR267 and NUR269) or NCE214OP, or Integrated Competency Assessment Network (ICAN) placement. Corequisites: NUR289 or permission of Nursing Department chairperson. Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

### NUR285 Developing the Nurse's Role II 1 credit 1 period lecture

Emphasis on synthesis of previously learned concepts to generate a plan for lifelong, professional role development. Concepts include role transition, professional organizations, legal issues, and licensure. **Prerequisites:** (NUR261, NUR263, NUR267, and NUR269), or NCE214OP, or Integrated Competency Assessment Network (ICAN) placement.

### NUR289

# Nursing Science IV

6 credits 18 periods lab Culminating clinical practice course to

provide learning experiences applying theoretical and clinical concepts of complex needs for pediatric, childbearing and high risk adults with multisystem alterations in health. Leadership, management, and caregiver roles of the professional nurse with clients and their families in selected areas of nursing practice are emphasized. Assignment of students to nurse preceptors with faculty guidance to focus on leadership/ management and application of nursing process theories, concepts, issues and trends in caring for clients in a variety of acute and community health care Prerequisites: settings. (NUR261, NUR263, NUR267, and NUR269), or NCE214OP, or Integrated Competency Assessment Network (ICAN) placement. Corequisites: NUR281 or permission of Nursing Department chairperson. Course Notes: Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

# OAS – Office Automation Systems

# OAS101

Computer Typing I: Keyboarding and Formatting

3 credits 5 periods lecture + lab (Offered days only)

Keyboard mastery; letters, tables, and reports; office production; and manuscripts. **Prerequisites:** None.

# OAS101AA

**Computer Typing I: Keyboard Mastery 1 credit 1.7 periods lecture + lab** Incorporates correct touch typing principles. **Prerequisites:** None.

### OAS101AB

# Computer Typing I: Letters, Tables, and Reports

**1 credit 1.7 periods lecture + lab** Letter, table, and report formatting. **Prerequisites:** OAS101AA or permission of department/division.

### OAS101AC

# Computer Typing I: Production and Manuscript

1 credit 1.7 periods lecture + lab Simple office projects and manuscripts. **Prerequisites:** OAS101AB or permission of department/division.

### OAS102

# Computer Typing II: Document Production

**3 credits 5 periods lecture + lab** Arrangement of letters, n

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 1.7 periods 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 1.7 periods lecture + lab Progression on speed/accuracy drills. Prerequisites: OAS103AA or permission of department/division.

### OAS103AC

# Computer Typing: Skill Building III 1 credit 1.7 periods lecture + lab

Progression on speed/accuracy drills. **Prerequisites:** OAS103AB or permission of department/division.

### OAS106

### Basic Machine Transcription 3 credits 5 periods 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 credits 3 periods lecture

(Days in Fall & 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 1.7 periods lecture + lab** Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. **Prerequisites:** None.

### OAS/BPC113

# Micro-Alphabetic Indexing

**1 credit 1.7 periods 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 1.7 periods lecture + lab** Touch system of numeric keys on ten-key pads. **Prerequisites:** None.

# OAS119

### Basic Data Entry Activities 1 credit 12 periods lab

Development of speed and accuracy of data entry skills. Includes vocabulary, keyboard drills, and data entry simulations. **Prerequisites:** (BPC111AA or OAS111AA or OAS101AA) or permission of instructor, OAS118 suggested but not required.

### **OAS121**

### Techniques of Proofreading 1 credit 1 period 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 credits 3 periods lecture (*Evenings, Spring only*)

Expectations of the professional in the electronic office of today. Realistic and practical coverage of roles, responsibilities, and environment. **Prerequisites:** None.

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## OAS/BPC130DK

# Beginning Word

1 credit 2 periods 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/BPC135DD WordPerfect: Level I

### 2 credits 2 periods 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.

# OAS/BPC135DK

# Word: Level I

# 2 credits 2 periods lecture

Using Word 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.

# **OAS181**

# Medical Office: Vocabulary

3 credits 3 periods lecture

Basic medical vocabulary with emphasis on pronunciation, spelling, and definition. **Prerequisites:** None.

### **OAS201**

# Computer Typing III: Advanced Document Production

**3 credits 5 periods 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 credits 3 periods lecture (*Evenings, Spring only*)

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 credits 4 periods lecture (*Evenings, Summer only*)

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.

### OAS225

# Legal Document Preparation

2 credits 3 periods lecture + lab Introduction to legal terminology and the techniques of keyboarding legal documents. **Prerequisites:** OAS102 or permission of department/division.

# OAS/BPC235DD WordPerfect: Level II

# 2 credits 2 periods lecture

Using WordPerfect word processing software features such as math, columns, macros, styles, graphics, sort, outlines, and table of contents. **Prerequisites:** BPC/OAS135DD or permission of instructor.

### OAS/BPC235DK Word: Level II 2 credits 2 periods 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 credits 5 periods lecture + lab

Development of transcription skills in 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 credits 5 periods lecture + lab

Development of recorded transcription skills in 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 credits 6 periods 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 credits 6 periods 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.

### **OAS243**

### Medical Transcription Refresher 1 credit 1.7 periods lecture + lab

Review of medical transcription skills. Equipment care and maintenance; use of medical references; transcription of various medical documents; proofreading for accuracy; speed development. **Prerequisites:** OAS242, or permission of department/division.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### OAS246 Medical Transcription Internship 1 credit 5 periods 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.

### OAS298

### Special Projects 1-3 credits 1-3 periods 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. Professionaltype 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.

# **PED – Physical Education**

# PED101, PED102, PED201, PED202 Physical Activities

**1 credit 2 periods each lecture + lab** Individual, dual, or team sports activities as listed in the schedule of classes. May be repeated for credit. **Prerequisites:** None.

### PED103, PED104, PED203, PED204 Physical Activities

**0.5 credit 1 period each lecture + lab** Individual, dual, or team sports activities as listed in the schedule of classes. May be repeated for credit. **Prerequisites:** None.

### PED111

### Aerobics

### 1.5 credits 3 periods lecture + lab

Aerobic activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warmup/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. **Prerequisites:** None.

### **PED112**

### Professional Applications of Fitness Principles 3 credits 3 periods lecture

Basic principles of fitness for the prospective fitness professional. Planning and teaching in a fitness program. Topics include exercise risks and safety, weight control, components of fitness, fitness assessment, and exercise programming. **Prerequisites:** None.

### PED113

# Weight Training

## 1.5 credits 3 periods 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 credits 3 periods lecture + lab

Fitness activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warmup/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. May be repeated for credit. **Prerequisites:** None.

### **PED115**

## Lifetime Fitness

# 2 credits 4 periods lecture + lab

Fitness activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warmup/stretch, aerobic exercise, selected strength exercises, and cooldown/stretch. May be repeated for credit. **Prerequisites:** None.

### **PED116**

# Aerobics for Wellness

## 2 credits 4 periods lecture + lab

Aerobic activity and wellness study to help develop a lifetime of regular exercise, stress management, and proper nutrition. Workout includes warmup/stretch, aerobic exercise, selected strength exercises, and cool down/stretch. May be repeated for a total of eight (8) credits. **Prerequisites:** None.

### PED117 Weight Training for Wellness 2 credits 4 periods 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. May be repeated for a maximum of eight (8) credits. **Prerequisites:** None.

# **PED125**

# Exercise Science

## 3 credits 3 periods 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.

### PED/WED130

### Strength Fitness - Physiological Principles & Training Techniques 3 credits 3 periods lecture + lab

Principles and techniques of strength training including strength physiology, performance factors, training recommendations, exercise techniques, and program design and management. **Prerequisites:** None.

### **PED140**

### Principles of Safe Exercise 1 credit 1 period 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.

### PED/HCE148

#### **Exercise Testing**

### 0.5 credit 1.5 periods lecture + lab

Study of exercise testing principles as performed under the supervision of a physician. **Prerequisites:** (HCC101, HCC103, HCC105, HCC107, and HCC109), or permission of program director. **Corequisites:** HCE140 or permission of program director.

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### **PED200**

# Introduction to Exercise Science & Physical Education

### 3 credits 3 periods lecture

Introductory course for students considering or just beginning a course of study in exercise science and physical education. Overview of each of the disciplines, sub-disciplines, and professions in the cross-discipline field of exercise science/physical education, including historical and philosophical foundations. Course emphasizes the study of physical activity. **Prerequisites:** None.

### PED210\*

### Movement Analysis \*

## 1 credit 3 periods lecture + lab

Practical application of biomechanical, physiological, psychological, and teaching/learning principles in the analysis of skill acquisition and performance. **Prerequisites:** None.

### \*PED210 Selected Movement Analysis Modules:

AF Aerobics	CR	Baseball
CX Basketball	HR	Fencing
IH Fitness Activities	JX	Golf
KF Gymnastics	IS	Individual
		Sports
NG New Games	OA	Outdoor
		Activities
PR Teaching Practicum	QV	Racquetball
PT Personal Training	TP	Soccer
SP Special Populations	UF	Softball
VH Swimming	WB	Team Sports
WH Tennis	WL	Track &
		Field
WT Volleyball	XP	Weight

Training

### PED262\*

### Sports Officiating\*

### 3 credits 3 periods lecture

Methods, materials and techniques of playing and officiating in [sport]. **Prerequisites:** None.

## \*PED262 Sports Officiating Modules:

- AA Baseball/Softball
- AB Football/Basketball

### PED262\*

# [Sport] Officiating

# 2 credits 2 periods lecture

Methods, materials, and techniques of playing and officiating in [sport]. May not be repeated for credit. **Prerequisites:** None.

\***PED262** Officiating Modules: BN Basketball VP Volleyball

### PED265\*

### [Sport] Theory of Coaching 3 credits 3 periods 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. PED281, suggested but not required.

\*PED265 Theory of Coaching Modules:

- BC Baseball
- BO Basketball
- FW Football
- SI Softball
- VC Volleyball

### PED281\*

# [Sport] Methods of Coaching

**3 credits 3 periods lecture** Techniques, methods, and procedures of coaching. May not be repeated for

credits. Prerequisites: None.

# \*PED281 Selected Methods

- of Coaching Modules:
- BC Baseball
- BO Basketball
- FW Football
- SC Soccer
- SI Softball
- VQ Volleyball

# PHI – Philosophy

### PHI101

# Introduction to Philosophy

**3 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Major theories of conduct. Emphasis on normative ethics, theories of good and evil from Plato to the present. **Prerequisites:** None.

### PHI106

# Critical Thinking and Problem-Solving 3 credits 3 periods lecture

Commonly used informal fallacies; examination of emotive and unclear uses of language, including sexism and loaded terms; and methods for analyzing extended arguments. Application to news media, advertising, political speeches, and textbooks. **Prerequisites:** ENG101 or ENG107 or equivalent.

### **PHI212**

### **Contemporary Moral Issues** 3 credits 3 periods lecture

Philosophical consideration of such moral issues as civil disobedience, preferential treatment, abortion, privacy, sexual morality, and poverty and hunger. **Prerequisites:** None.

### PHI/REL213

### Medical and Bio-Ethics 3 credits 3 periods 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.

# **PHI224**

# Political Philosophy

**3 credits 3 periods lecture** Predominant figures and theories in Euroamerican political philosophy from Plato to contemporary social/political philosophers. **Prerequisites:** None.

### PHI/REL/HIS243 World Religions 3 credits 3 periods 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.

### PHI/REL244 Philosophy of Religion 3 credits 3 periods lecture Religious language, the existence of God,

miracles, and human destiny. **Prerequisites:** None.

# **PHS – Physical Science**

### **PHS110**

# Fundamentals of Physical Science 4 credits 6 periods 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 credits 6 periods lecture & lab

A survey of physics emphasizing applications of physics to modern life. Designed for students who need a course in physics in order to understand the physical basis of modern technology. **Prerequisites:** Grade of "C" or better in MAT091 or MAT092, or satisfactory score on Math placement exam.

### PHY111

## General Physics I

### 4 credits 6 periods lecture & lab

Includes motion, energy, and properties of matter. **Prerequisites:** Trigonometry or department consent. **Course Note:** Recommended for preprofessional and suggested for certain other majors.

## PHY112

# General Physics II

4 credits 6 periods lecture & lab Includes electricity, electromagnetism, and modern physics. **Prerequisites:** PHY105 or PHY111.

### **PHY121**

## University Physics I: Mechanics 4 credits 6 periods 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 department consent. One year of High School physics or PHY111 and PHY112 suggested but not required.

#### PHY131

### University Physics II: Electricity and Magnetism 4 credits 6 periods 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 department consent, and PHY121. **Corequisites:** MAT241 or department consent.

# **POS – Political Science**

### POS099

# United States Citizenship Preparation 1 credit 1 period 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Survey of state and local government in the United States. Special attention on Arizona State Government. Prerequisites: None.

### POS140

## Comparative Government 3 credits 3 periods 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.

### POS180

# United Nations Studies

**3 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Examination of the United States Constitution and the constitution and government of the State of Arizona. **Prerequisites:** None.

## POS221

# Arizona Constitution

1 credit 1 period 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 credits 2 periods lecture

Examination of the United States Constitution. Equivalent to the first part of POS220. May not enroll in POS220 and POS222 concurrently. **Prerequisites:** None.

### POS280

Internship Orientation

# 1 credit 1 period lecture

Preparation for an internship experience and appropriate intern behavior. **Prerequisites:** Permission of instructor.

### POS281AA

## Public Policy/Service Internship 2 credits 2 periods 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.

### POS281AB

### Public Policy/Service Internship 3 credits 3 periods 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 credits 4 periods 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 1 period lab

Service-learning field experience within agencies, government 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 Standard grading available hours. according to procedures outlined in catalog. Prerequisites: Permission of instructor.

## POS282AB

### Volunteerism for Political Science: A Service Learning Experience 2 credits 2 periods 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 credits 3 periods 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.

# PSY – Psychology

### PSY101

# Introduction to Psychology 3 credits 3 periods 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.

### **PSY102**

### Introduction to Psychology Lab 1 credit 1 period lab

Optional laboratory designed to accompany PSY101. Application of psychological principles in areas such as learning, memory, emotion, motivation, cognition, language, development, personality, and intelligence. **Prerequisites or Corequisites:** PSY101 or permission of instructor.

### PSY/CFS130

### Demystifying Adolescence 1 credit 1 period 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 credits 3 periods 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, and Bisexual Studies 3 credits 3 periods lecture

Introduction to the study of lesbian, gay, and bisexual 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 studies. **Prerequisites:** None.

### PSY201AA-AC Selected Issues in Psychology 1-3 credits 1-3 periods 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, applied-experimental perception, 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.

### PSY210 Educational Psychology 3 credits 3 periods lecture

Scientific research and psychological principles as they apply to teaching and learning. The role of psychology in educational settings, human diversity, theories of learning, intelligence, memory, creativity, assessment, and factors influencing effective instruction and learning. **Prerequisites:** PSY101 with a grade of "C" or better or permission of instructor.

### **PSY215**

# Introduction to Sport Psychology 3 credits 3 periods lecture

Application of the psychological, behavioral, social, cognitive, and humanistic perspectives in psychology to sport. Includes topics such as optimal performance, correlation, motivation, coaction effect, self-actualization, psychobehavioral 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 credits 3 periods 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 credits 3 periods 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 2 periods lab

Applications of inferential and descriptive statistics to computers in the field of psychology. **Corequisites:** PSY230.

### PSY235

## Psychology of Gender Differences 3 credits 3 periods lecture

To assess historical and psychological perspectives on women and men and to evaluate contemporary viewpoints regarding the psychology of women and men. **Prerequisites:** PSY101 with a grade of "C" or better or permission of instructor.

### **PSY240**

### Developmental Psychology 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

Survey of psychological aspects of human sexual behavior. Emphasis placed on integration of the cognitive, emotional, and behavioral factors in sexual functioning. **Prerequisites:** PSY101 with a grade of "C" or better, or permission of instructor. Students must be 18 years or older.

### PSY290AB Research Methods 4 credits 6 periods lecture & lab

Planning, execution, analysis, and written reporting of psychological research. Surveys the literature, procedures, and instruments in representative areas of psychological research. **Prerequisites:** ENG101, ENG107 or equivalent. **Prerequisites** or **Corequisites:** PSY230 (or equivalent) with a grade of "C" or better, or permission of instructor.

# PSY298

### Special Projects 1-3 credits 1-3 periods 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. Professionaltype 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 247.

### RDG008 Phonics

### 3 credits 3 periods 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 (ASSET) or permission of instructor.

### **RDG010**

Reading English as a Second Language I

### 3 credits 3 periods 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.

### RDG014

# Advanced Vocabulary for ESL Speakers (Non-Native Speakers)

# 3 credits 3 periods lecture

**NOTE:** Course changes not available at time of printing. Consult with Academic Advisement.

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:** RDG010 with grade of "C" or better, or permission of instructor.

### RDG020

### Reading English as a Second Language II

## 3 credits 3 periods 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 credits 3 periods 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.

### RDG040

# Reading English as a Second Language IV

## 3 credits 3 periods 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.

### **RDG081**

### Reading Improvement 3 credits 3 periods lecture

Designed to improve basic reading skills. Includes word recognition, prediction of contents of reading selections, and development of basic vocabulary. Emphasis on identifying main ideas and related details. Reviews following directions and the understanding of graphic materials. **Prerequisites:** Placement test score or permission of instructor.

### RDG091

### College Reading Skills I 3 credits 3 periods 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:** Reading placement test score (ASSET) or grade of "C" or better in RDG081, or permission of instructor.

### **RDG100**

# College Study Skills

### 3 credits 3 periods 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.

# REA – Real Estate

### **REA179**

### Real Estate Principles I 3 credits 3 periods 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.

### **REA201**

### Real Estate Principles I and II 6 credits 6 periods 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.

### REA201AA

## Real Estate Exam Preparation 1 credit 1 period lecture

Complete review of real estate principles in preparation for taking Arizona's real estate license exam. **Prerequisites:** [Grade of "C" or better and 90 hours of school-verified attendance in (REA179 and REA180) or REA201] or permission of department. **Course Note:** Students must complete final exam at 70% in order for the college to issue their prelicensure certificate.

### REA290AH

# Real Estate Seminar: Contract Writing 0.5 credit 0.5 period lecture

Contract writing skills, techniques, and requirements. Writing of basic real estate contracts, including purchase offers, counter offers, sales listing agreements, and riders. **Prerequisites:** (REA180 or REA201 or current Arizona Real Estate License) or permission of department. **Course Note:** Completion of this module can be applied toward the six- (6-) hour contract-writing requirement for Arizona Real Estate License application and renewal.

# **REC – Recreation**

### **REC120**

# Leisure and the Quality of Life 3 credits 3 periods 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.

# REC/GCO131

## Horticulture

# 2 credits 2 periods lecture

Identification and classification of common plants in the Southwest. Study of basic plant structure, growth processes, reproduction and environmental influences on plant growth processes. **Prerequisites:** None.

### REC/GCO132

# Landscape Management

### 2 credits 3 periods lecture + lab

Identification of plants commonly used in Arizona landscaping. Includes trees, shrubs, vines, flowers, and ground covers. Techniques for planting, watering, and fertilizing recreational grounds. Pest control planning. **Prerequisites:** None.

# REC/GCO133

# Soil Management

### 2 credits 3 periods lecture + lab

Origin, formation, physical and chemical properties of soils. Includes soil testing, fertilization, and modification of techniques to manage soils on recreational grounds. **Prerequisites:** None.

### REC/GCO134

### Irrigation and Water Management 2 credits 3 periods lecture + lab

Irrigation and water management systems used on recreational grounds. Installation and repairs of sprinklers, valves, piping, electrical systems, and pumps. **Prerequisites:** None.

### REC/GCO135

## Fertilizers

# 2 credits 3 periods lecture + lab

Fertilizer plans used on recreational grounds. Focuses on the equipment used and results of different types of fertilizers. Emphasis on safety and environmental concerns. **Prerequisites:** None.

### REC/GCO136 Integrated Pest Control 2 credits 3 periods lecture + lab

Identification of harmful and beneficial insects, weeds, and plant diseases. Methods of effective insect, weed, and plant disease control. Safe handling of pesticides. Preparation for State of Arizona Class I Golf Course Pesticide Certification. **Prerequisites:** None.

### REC/GCO137

# Turfgrass Management

2 credits 3 periods lecture + lab

Identification of turfgrasses used in the Southwest. Establishment and maintenance of turfgrasses on recreational grounds. **Prerequisites:** None.

## REC/GCO138

Clubfitting/Repair

### 1 credit 2 periods lecture + lab

Basic principles of golf club design. Includes personal fitting of golf clubs to customer needs as well as repair. **Prerequisites:** None.

### REC/GCO139

### Pro Shop Merchandising 1 credit 1 period lecture

Focus on principles of merchandising related to a pro shop. Includes components of display and visual presentation of merchandise. **Prerequisites:** None.

### REC/GCO144

### Sharpening & Grinding Equipment 1 credit 2 periods lecture + lab

Principles and practices of sharpening and grinding of recreational grounds equipment. **Prerequisites:** None.

### REC/GCO145

# Equipment Mechanics and Shop Management

#### 3 credits 4 periods lecture + lab

Principles of mechanics as applied to turfgrass and hand-held equipment. Maintenance, repair, operation, and shop management of equipment. Development of equipment inventory and buyers' guide files. Application of federal and maintenance and repair shop safety regulations. **Prerequisites:** None.

# REC/GCO146 Equipment Maintenance and Repair

**3 credits 4 periods lecture + lab** Additional principles of mechanics as applied to turfgrass and hand-held

applied to turfgrass and hand-held equipment. Includes equipment components such as engines, motors, hydraulics, and fuel lubricating systems. Operation, maintenance, and repair of tractors, mowers, and motorized carts. Stocking and maintaining a parts and supply inventory system. Application of federal and maintenance and repair shop safety regulations. **Prerequisites:** REC/GCO145.

### REC150AA

### Outdoor Adventure Skills Field Experience 1 credit 2 periods lab

Practical application of outdoor skills including camping, equipment selection and use, cooking, fire building, camp programs, backpacking, and safety. **Prerequisites:** None.

### **REC210**

### Leisure Delivery Systems 3 credits 3 periods lecture

Systematic study of Delivery of Leisure Services in public, commercial, and independent sectors; particular emphasis placed on the urban setting. **Prerequisites:** None.

### REC/GCO211

### Pro Shop Management Practicum 1 credit 4.75 periods lab

Application of pro shop management knowledge and skills at a practicum site. **Prerequisites:** Permission of instructor.

### REC/GCO212

### Turf and Irrigation Practicum 1 credit 4.75 periods lab

Application of turf and irrigation technology, knowledge, and skills at a practicum site. **Prerequisites:** Permission of instructor.

## REC/GCO213

# **Horticulture Practicum**

1 credit 4.75 periods lab Application of horticultural knowledge

and skills at a practicum site. **Prerequisites:** Permission of instructor.

### REC/GCO214 Pesticide Practicum 1 credit 4.75 periods lab

Application of pesticide knowledge and skills at a practicum site. **Prerequisites:** Permission of instructor.

### REC/GCO215

# Equipment Maintenance and Repair Practicum

### 1 credit 4.75 periods lab

Application of equipment maintenance and repair at a practicum site. **Prerequisites:** Permission of instructor.

### **REC250**

### Recreation Leadership 3 credits 3 periods lecture

An examination of roles and methods of leadership in leisure services settings. Overview of theories and models of leadership, group dynamics, participant motivation, communication, and face-toface leadership. Exploration of leadership contexts, including coaching officiating and sports, leading community groups and volunteers, working with persons in various life stages and with varying abilities, and leading different recreation activity areas. Prerequisites: None.

# REC/GCO271AC

### Recreational Resources & Facilities Management Internship 3 credits 15 periods lab

# Work experience in a recreational resources and facilities setting. Fifteen (15) hours of work weekly. Supervision

and evaluation by internship coordinator. May be repeated for a total of six (6) credits. **Prerequisites:** Permission of department/division.

# **REL – Religious Studies**

# REL203/AIS213 American Indian Religions

**3 credits 3 periods 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 credits 3 periods 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.

### REL/PHI213

### Medical and Bio-Ethics 3 credits 3 periods lecture

A philosophical consideration of moral problems that arise in relation to medicine and biology, e.g., death, patient rights and biological experimentation.

### REL/HIS/PHI243 World Religions 3 credits 3 periods lecture

Prerequisites: None.

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.

### REL/PHI244

# Philosophy of Religion

3 credits 3 periods lecture

Religious language, the existence of God, miracles, and human destiny. **Prerequisites:** None.

### REL/PHI246

### American Indian and Euroamerican Comparative Worldviews 3 credits 3 periods lecture

Examination of American Indian worldviews and comparison of these worldviews with Euroamerican philosophical assumptions. Consideration of possibilities for mutual criticism and dialogue between American Indian and Euroamerican traditions. **Prerequisites:** None.

### REL/WST290 Women and Religion

# 3 credits 3 periods 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.

# SBS – Small Business Management

### SBS220

# Internet Marketing for Small Business 2 credits 2 periods lecture

"e-Commerce"-doing Focuses on business on the Internet and planning a web site. Topics include: how the Internet can help growth and success of business; examples of successful marketing on the Internet; availability of Internet services; necessary hardware and software for marketing on the Internet; determining products/services appropriate for Internet marketing; budget constraints and on-going operations of the Internet site. Prerequisites: None.

### SBS216

### Planning for a Small Business 2 credits 2 periods 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

### **SBU100**

## Professional Business Ethics 3 credits 3 periods lecture

Theoretical and practical consideration of past and present ethical issues in business; analyzes the applied ethics of professional and corporate responsibility, government regulation, advertising, the environment, hiring practices, politics and lobbying, product liability, and technology using philosophical and/or religious ethical systems of thought. Encourages critical thinking and value decision making within the perspective of current business contexts and such concerns, as professional organizations, multicultural and global environments, and minority- and women-owned business, in international business and professional communities. Prerequisites: None.

### SBU200 Society and Business 3 credits 3 periods lecture

The study 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 business responses. **Prerequisites:** None.

# SLG - Sign Language

*Also see Interpreter Preparation, IPP on page* 291.

### SLG090AA

### Speedy Sign Language I 1 credit 1 period lecture

Introduction of techniques for communicating with deaf people using American Sign Language (A.S.L.). Expressive and receptive sign skills, manual alphabet, numbers, and basic sign vocabulary. **Prerequisites:** None. Suggested but not required: SLG103.

### SLG090AB

### Speedy Sign Language II 1 credit 1 period 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 credits 4 periods lecture

Introduction of principles, methods, and techniques for communicating with deaf people who sign. Development of expressive and receptive sign skills, manual alphabet, numbers, and sign vocabulary. Overview of syntax, grammar, and culture related to American Sign Language (A.S.L.). **Prerequisites:** None. SLG103 suggested as a corequisite but not required.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### SLG102

### American Sign Language II 4 credits 4 periods 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 1 period 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 credits 2 periods 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 credits 2 periods 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.

### **SLG200**

### Issues and Aspects of Deafness 3 credits 3 periods 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, SLG103 with a "C" or better, or permission of department/division.

### SLG201 American Sign Language III 4 credits 4 periods 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 credits 4 periods 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:** SLG103 and SLG201 with a grade of "C" or better, or permission of department/division. Suggested but not required: ENG101, SLG200, and CRE101 or CRE111 or exemption by score on the reading placement test (ASSET).

### **SLG203**

### American Sign Language V 4 credits 4 periods 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 credits 3 periods 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.

### **SLG205**

## Introduction to Interpreting 3 credits 3 periods lecture

of Theories 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.) Code of Ethics. Additional topics addressed include interpreters functioning as advocates, moral systems vs. ethical systems, standard business practices, and of perceptions consumers. Prerequisites: SLG201 with a grade of "C" or better, or permission of department/division.

## SLG212

### Deaf Culture 3 credits 3 periods lecture (Spring only)

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.

### **SLG215**

### Sign to Voice 3 credits 3 periods lecture

Interpreting sign language into spoken English. Includes expanding spoken vocabulary and improving technical skills. Additional hours outside regular classroom schedule required. **Prerequisites:** SLG206 with a grade of "B" or better, or permission of department/division.

### SLG242

### Educational Interpreting 3 credits 3 periods lecture (*Evening only*)

Direct application of interpreting in the classroom. Experience with the process and decision interpreting making through role-playing. Presentations and use of initialized signs with conceptual accuracy. Emphasis on self monitoring and feedback skills. Includes required student observations of educational interpreting outside of class. Prerequisites: SLG200 and SLG201 with a grade of "C" or better, or permission of department/division.

# SOC – Sociology

### SOC101

# Introduction to Sociology

3 credits 3 periods lecture

Fundamental concepts of social organization, culture, socialization, social institutions and social change. **Prerequisites:** None.

### SOC140

### Racial & Ethnic Minorities 3 credits 3 periods lecture

Contemporary racial and ethnic intergroup relations emphasizing cultural origins, developments, and problems of minority groups in the United States. **Prerequisites:** None.

### SOC157

### Sociology of Marriage & Family 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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 credits 3 periods lecture

A sociological exploration of selected social problems. Emphasis on current concerns. **Prerequisites:** SOC101.

# SPA – Spanish

# SPA085AA Speedy Spanish I 1 credit 1 period lecture

Basic vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. **Prerequisites:** None.

# SPA085AB

# Speedy Spanish II

# 1 credit 1 period 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 1 period lecture

Advanced development of vocabulary and grammar to develop conversational skills in Spanish. Emphasis on speaking skills. **Prerequisites:** SPA085AB.

### SPA086

# Review of Speedy Spanish 0.5 credit 0.5 period 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 credits 4 periods 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 credits 4 periods 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 departmental approval.

### **SPA103**

## Elementary Spanish for Spanish Speakers I

## 4 credits 4 periods 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:** Spanishspeaking or departmental approval.

# SPA111

# Fundamentals of Spanish 4 credits 4 periods lecture

Accelerated study of elementary Spanish for students with previous Spanish coursework. Includes basic Spanish grammar, pronunciation, vocabulary and the study of the Spanish-speaking cultures. Emphasis on speaking, listening, reading, and writing skills. **Prerequisites:** SPA101, or SPA115, or two years of high school Spanish.

## **SPA115**

### Beginning Spanish Conversation I 3 credits 3 periods lecture

Conversational Spanish. Basic sentence structure, pronunciation and vocabulary necessary to develop speaking ability in Spanish. Designed for students seeking speaking and listening abilities with little emphasis on grammar. **Prerequisites:** None.

## **SPA116**

## Beginning Spanish Conversation II 3 credits 3 periods lecture

Continued development of speaking and listening skills for effective communication in Spanish. **Prerequisites:** SPA115 or departmental approval.

### **SPA117**

# Health Care Spanish

### 3 credits 3 periods 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.

# SPA117AA

# Medical Spanish I

### 1 credit 1 period lecture

Basic medical terminology in Spanish for health care personnel. Emphasis on pronunciation and vocabulary needed in health care setting. **Prerequisites:** None.

# SPA117AB

### Medical Spanish II

# 1 credit 1 period lecture

Basic Spanish communication for health care personnel. Emphasis on pronunciation and vocabulary needed in health care settings. **Prerequisites:** SPA117AA or permission of instructor.

### SPA195

### Basic Spanish Study Tour 1 credit 1 period lecture

One-week tour designed to develop tourist vocabulary and survival skills in a Spanish-speaking country. Also includes cultural tours to museums and architectural sites. **Prerequisites:** None.

### SPA201

### Intermediate Spanish I 4 credits 4 periods 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, two years of high school Spanish or departmental approval.

### **SPA202**

### Intermediate Spanish II 4 credits 4 periods lecture

Review of grammar, continued development of Spanish language skills with continued study of the Spanishspeaking cultures. **Prerequisites:** SPA201 or equivalent or departmental approval.

### **SPA203**

# Spanish for Spanish-Speaking Students I

### 4 credits 4 periods 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 credits 4 periods 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.

# SPA217

# Spanish for Business Communication 4 credits 4 periods lecture

General business terminology, situations and correspondence in Spanish, including sections on cultural differences that can affect business transactions. Various specific business situations in Latin America and Spain contrasted with similar situations in the USA. **Prerequisites:** GBS151 and (SPA201 or permission of instructor).

### SPA225

### Intermediate Spanish Conversation I 3 credits 3 periods lecture

Continued development of skills in conversational Spanish. A review of the major grammatical and pronunciation problems. **Prerequisites:** SPA116, or SPA102 or departmental approval.

### SPA226

### Intermediate Spanish Conversation II 3 credits 3 periods lecture

Continued development of skills in conversational Spanish with a review of grammatical problems. **Prerequisites:** SPA225, two years Spanish or the equivalent or departmental approval.

### **SPA235**

### Advanced Spanish Conversation I 3 credits 3 periods 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 credits 3 periods lecture

Further development of skills in conversational fluency. Grammar presented only to clarify student errors. **Prerequisites:** SPA235, or equivalent, or departmental approval.

# **SPA237**

### Spanish Legal Terminology 3 credits 3 periods lecture

Emphasis on legal terminology, including specific vocabulary and linguistic structures. Conducted entirely in Spanish. **Prerequisites:** SPA202, or equivalent, or permission of instructor.

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### **SPA240**

### Spanish for City Courts 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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.

# **SPA270**

# Teacher Bilingual Certification Exam Preparation

### 1 credit 1 period 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 1 period 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 credits 3 periods lecture

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 credits 3 periods 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

### STO292

The Art of Storytelling

# 3 credits 3 periods 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 credits 3 periods 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.

### SWU170

Disaster Response Planning for Organizations

## 3 credits 3 periods lecture

Preparedness planning for major community disasters. Addresses preparedness, response, and recovery. Creation of disaster management plan. **Prerequisites:** None.

### SWU275AA

# Case Report Writing I

1 credit 1 period 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 credits & 1-3 periods 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.

### SWU291

### Social Service Delivery Systems 3 credits 3 periods 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 credits 3 periods 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.

# TDP – Terrorism & Disaster Preparedness

### TDP101

# Weapons of Mass Destruction (WMD) Terrorism Awareness

# 0.5 credit 0.5 period lecture

Designed to give participants a basic awareness of terrorist threats and vulnerabilities within the community. Weapons of Mass Destruction (WMD) hazards, behavioral responses to these incidents, and crisis management within a community responding to a terrorist attack discussed. Overview of WMD radiological, biological, and chemical agents in context to a terrorist assault within the community. Includes methods of delivery and the devices that terrorists use to disseminate WMD agents as well as community response strategies and risk management plans for the protection of the community. Prerequisites: None.

### TDP102

### Basic Concepts for Weapons of Mass Destruction (WMD) Incidents 1 credit 1 period lecture

Designed to give participants a basic awareness of the knowledge and skills necessary to plan and manage a Weapons of Mass Destruction (WMD) incident through the roles and responsibilities of the incident command system (ICS) , using the eight functions of command. Use of a multidiscipline approach to ICS, integrating the local unified command system to approach and manage a WMD incident. Includes community response strategies and risk management plans for the protection of the community. **Prerequisites:** None.

### **TDP201**

### Weapons of Mass Destruction (WMD) Incident Management/Unified Command

### 1 credit 2 periods lecture + lab

Training for emergency responders in skills necessary to manage a WMD/terrorism incident by adapting the existing Incident Command System (ICS) to the unique challenges posed by the integration of local, state, and federal agencies and departments into a unified command structure. **Prerequisites:** Permission of instructor.

For additional information on PC program competencies, visit:

http://www.dist.maricopa.edu/academic/curric/progpc.php

For additional information on MCCCD course competencies, visit:

http://www.dist.maricopa.edu/academic/curric/cs.php

### TDP282AA-AC Volunteerism for Terrorism and Disaster Preparedness

1-3 credits 1-3 periods lecture + lab Service-learning field experience within private/public agencies and citizen volunteer groups. **Prerequisites:** Permission of instructor. Course Notes: May be repeated for a total of six (6) TDP282 credit hours; may not repeat specific agency assignment for more than three (3) credit hours. Offered as credit (P) or no credit (Z) basis. Standard grading available according to procedures outlined in catalog.

# **TEC – Textiles & Clothing**

### **TEC105**

### Clothing Selection

### 3 credits 3 periods 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 credits 3 periods lecture

(Not offered every semester) Consideration of historic factors influencing fashion and fashion change with special emphasis on historic costume. **Prerequisites:** None.

### **TEC110**

### Basic Sewing Skills

**3 credits 4 periods 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 credits 5 periods 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 1.5 periods 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 2 periods lecture + lab

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 1.5 periods 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

# **TEC116**

three (3) credits.

### Textiles: Stitchery and Embellishment 1 credit 1.5 periods lecture + lab

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.

### **TEC120**

### Intermediate Clothing Construction 2 credits 4 periods 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.

### **TEC124**

### Advanced Clothing Construction 3 credits 5 periods 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.

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### **TEC125**

Fashion Design 3 credits 3 periods lecture (Not offered every semester)

Practical techniques of fashion sketching, pattern drafting, and draping. Design apparel. **Prerequisites:** None. TEC106 and TEC111 suggested but not required.

## **TEC126**

### Sewing for the Home 3 credits 3 periods lecture

Emphasizes techniques used in producing household textile goods such as slip covers, bedspreads, window treatments, linens, accessories, pillows, etc. Experience using a sewing machine assumed. May be repeated for a total of 9 credit hours with instructor permission. **Prerequisites:** None.

## **TEC127**

### Computer-Assisted Fashion Design 2 credits 2 periods 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. **Course Note:** May be repeated for a total of six (6) credits.

### **TEC129**

### Sewing with a Serger

**2 credits 2 periods lecture + lab** Operation of a home serger. Use in constructing, finishing, and decorating garments and home decorations. Home serger required. **Prerequisites:** None.

### **TEC134**

### Fashion Illustration I 3 credits 5 periods 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.

## **TEC135**

### Fashion Illustration II 3 credits 5 periods 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.

### **TEC136**

### Fashion Illustration III 3 credits 5 periods 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.

### **TEC222**

Textiles

# 3 credits 3 periods lecture

(Not offered every semester)

Study of textile fibers and fabrics, their properties, identification, selection, use and care. **Prerequisites:** None.

### **TEC223**

### Tailoring

### 3 credits 5 periods lecture + lab

Principles of tailoring as applied in the construction of a coat or suit. Alteration of patterns and fitting techniques. **Prerequisites:** TEC111 or permission of instructor. **Course Note:** May be repeated for a total of 12 credit hours with permission of instructor.

### **TEC224**

### Pattern Drafting 2 credits 3 periods 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 credits 5 periods 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 credits 5 periods 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 credits 5 periods lecture + lab (Not offered every semester)

Construction techniques used in couture sewing. Includes fabric selection, fitting, fabric preparation, hand sewing, garment shaping, finishes, edge 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.

### **TEC228**

### Advanced Draping for Fashion Design 3 credits 5 periods 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 credits 5 periods 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 credits 5 periods 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.

### TEC236 Portfolio Development 1 credit 1.5 periods 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:** TEC127, TEC135, or permission of instructor.

### TEC270

## Design Studio

### 1 credit 1 period lab

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.

### TEC/MKT271AA

### Fashion Design Internship 1 credit 5 periods 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.

### TEC/MKT271AB

### Fashion Design Internship 2 credits 10 periods 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 credits 15 periods 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 & THP — Theatre Performance/ Production

### **THE111**

#### Introduction to Theatre 3 credits 3 periods 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.

## THE/HUM205

# Introduction to Cinema

# 3 credits 3 periods 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 credits 3 periods lecture

A study of contemporary films, directors and critics with emphasis on evaluating film as an art form. **Prerequisites:** None.

## **THE220**

## Modern Drama 3 credits 3 periods 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 credits 15 periods 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 credits 1-3 periods 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. Professionaltype 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.

# THP112 Acting I 3 credits 4 periods 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 credits 4 periods lecture + lab** Purposes, materials, and techniques of theatrical makeup. **Prerequisites:** None.

# THP201AB Theatre Production II 2 credits 4 periods 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.

# THP210

# Acting: TV/Film

**3 credits 4 periods lecture + lab** Special technical aspects of acting before a camera. **Prerequisites:** THP112 or permission of instructor.

# **THP212**

### Acting II

**3 credits 4 periods lecture + lab** Fundamental techniques of acting through script analysis, rehearsal, and performance. **Prerequisites:** THP112 or departmental approval.

# **THP213**

## Introduction to Technical Theatre 3 credits 5 periods 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 credits 4 periods lecture + lab** Advanced character analysis and makeup design. Technical application of makeup. **Prerequisites:** THP115.

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# **THP216**

### Beginning Stage Lighting 3 credits 4 periods 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.

## THP/COM241

### Performance of Literature 3 credits 3 periods lecture

The study, analysis and preparation for oral presentation of prose, poetry, and dramatic literature. Preparation of material for public audiences. **Prerequisites:** ENG101 or ENG107 or equivalent.

# THP/COM271

# Voice and Diction

# 3 credits 3 periods lecture

Exercises and techniques to free the voice and improve projection, resonance, and articulation. Covers international phonetic alphabet and standard stage speech. **Prerequisites:** None.

# WED – Wellness Education

# WED100

# Personal Wellness

### 2 credits 2 periods lecture + lab

Overview of wellness and its relationship to personal health Understanding of personal wellness lifestyle through assessments. Introduction to wellness and healthrelated topics including fitness, relationships, nutrition, self-care, abusive behaviors, mind/body connection, and other current issues in health. Prerequisites: None.

### WED/PED121

### Physical Conditioning for Massage Therapists

### 1 credit 2 periods lecture + lab

Physical fitness necessary for current and prospective massage therapists. Includes physical fitness and workout techniques as related to performing massage therapy; individual conditioning strategies, and basic nutritional guidelines. **Prerequisites:** None.

### WED/PED130

### Strength Fitness - Physiological Principles & Training Techniques 3 credits 3 periods lecture + lab

Principles and techniques of strength training including strength physiology, performance factors, training recommendations, exercise techniques, and program design and management. **Prerequisites:** None.

### WED151

# Introduction to Alternative Medicine 3 credits 3 periods lecture

Definition of health; exploration of mindbody-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.

# WED154 Creativity and Wellness 2 credits 2 periods lecture

Characteristics of creativity and right brain activity, factors that encourage and stifle creativity; and exercises that foster creativity. **Prerequisites:** None.

### WED156 Humor and Play 1 credit 1 period 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.

### WED162

# Meditation and Wellness

**1 credit 1 period 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 credits 2 periods 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 1 period 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 1 period 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 1 period 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.

### WED204

### Managing a Massage Practice 2 credits 2 periods lecture

Application of practical methods of researching and writing a business plan for massage therapy. **Prerequisites:** None. **Corequisites:** WED250, or permission of instructor.

### WED210

### Sports Massage

### 2 credits 3 periods 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 credits 5 periods 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 1 period 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 credits 9 periods 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:** (BIO160 and WED165), or permission of Program Director.

### WED231

### Therapeutic Massage Practices II 6 credits 9 periods 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 credits 10 periods 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 neuromusculoskeletal disorders/injury and special populations. Application of massage techniques with therapist's preand 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 credits 6 periods lab

Application of fundamental massage techniques. **Prerequisites:** WED231. **Corequisites:** WED232, and permission of Program Director.

### WED262

### Acupressure/Shiatsu I 2 credits 3 periods 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:** WED250, and permission of instructor.

### WED264

### Acupressure/Shiatsu II 2 credits 3 periods lecture + lab

Therapeutic techniques and applications for Anma 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.

### WED270

### Introduction to Cardiac and Pulmonary Rehabilitation

### 1 credit 1 period lecture

Overview of field of cardiac and pulmonary rehabilitation. Emphasis on basic principles and related skills for the health care professional. **Prerequisites:** Baccalaureate degree in a health care related profession or permission of instructor.

### WED271

## Cardiovascular and Pulmonary Physiology

### 3 credits 3 periods lecture

Encompasses the aspects of cardiovascular anatomy and physiology for healthy individuals and for those patients with cardiovascular or pulmonary disease. **Prerequisites:** Baccalaureate degree in a health care related profession or permission of instructor.

### WED272

### Principles for Educating the Adult Patient

### 1 credit 1 period lecture

Basic principles for educating patients in a health care setting. **Prerequisites:** Baccalaureate degree in a health care related profession or permission of instructor.

# WED273

### Assessment of the Cardiac & Pulmonary Rehabilitation Patient 0.5 credit 1.5 periods lecture + lab

Basic health assessment of the adult client. Emphasis on collecting health histories and performing physical examinations. Includes cultural considerations in health assessment. **Prerequisites:** Baccalaureate degree in a health care related profession or permission of instructor.

### WED297AA-AC

### Special Topics: Therapeutic Massage 1-3 credits 1-3 periods 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.

# WLD – Welding Technology

# WLD101 Welding I

3 credits 6 periods lecture + lab

Principles and techniques of electric arc and oxyacetylene welding and cutting. Provides technical theory and basic skill training in these welding processes. **Prerequisites:** None.

# WLD106

# Arc Welding

**5 credits 8 periods lecture + lab** Electric welding with emphasis on metallic arc welding in out-of-position practice and procedures. **Prerequisites:** None.

### WLD150

### Welding Blueprint Reading 3 credits 3 periods lecture

Analysis and interpretation of technical drawings common to the metal fabrication and construction trades. Welding blueprint symbols. **Prerequisites:** None.

### WLD201

Welding II

### 3 credits 6 periods lecture + lab

Further study of electric arc and oxyacetylene welding with emphasis on GTAW (heliarc) and GMAW (mig) processes to weld both ferrous and nonferrous metal. **Prerequisites:** WLD101.

### WLD 206

Advanced Welding – Heliarc and Wire Feed

### 5 credits 8 periods lecture + lab

Instruction in theory and practice on tungsten inert gas and wire feed welding. Welding procedures on ferrous and nonferrous metals. Set up and operation of all types of machines used in tig and mig welding. **Prerequisites:** WLD106 or departmental permission.

### WLD 208

### Advanced Arc Welding - Certification 5 credits 8 periods lecture + lab

Advanced metallic arc welding emphasizing out-of-position welding in preparation for certification. Includes various test methods. Provides training on machine flame cutting and gouging and arc air cutting and gouging. **Prerequisites:** WLD106 or permission of instructor.

# WST – Women's Studies

### **WST100**

Women and Society 3 credits 3 periods lecture Introduction to critical issues in women's studies. Prerequisites: None.

### WST105

# Women of Color in America

3 credits 3 periods lecture

Analysis and discussion of critical issues for women of color in America. **Prerequisites:** None.

## WST110

# Women and Gender: A Feminist Psychology

### 3 credits 3 periods lecture

A discussion of the psychology of gender and sex from a feminist perspective. **Prerequisites:** None.

## WST120

### Gender, Class, and Race 3 credits 3 periods 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/AIS128

## Law and Violence Against Women 3 credits 3 periods 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 presentday 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 credits 3 periods lecture

Introduction to American women's history, from the colonial period to suffrage in 1920, based on a feminis perspective. **Prerequisites:** None.

### WST161

### American Women Since 1920 3 credits 3 periods 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.

### WST/HUM209

# Women and Films

**3 credits 3 periods lecture** Analysis of images of women in film from both historical and contemporar

perspectives. Prerequisites: None.

# WST/AIS/ENH261 Native Women's Literature: The Americas

# 3 credits 3 periods 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 credits 3 periods 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 credits 3 periods 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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#### **CAREER SERVICES**



http://www.phoenixcollege.edu/careercenter Phone: 602.285.7420 • Fax: 602.285.7951

#### **Career Services Staff**

Queta Chavez, Counseling Department Chair Debby Smith, Coordinator of Career Services Bill Dilgard, Career Technician *Counselors in the Counseling Department are also available* 

#### **Career Services**

#### Are you undecided about your career or college major?

Career Services provides career development resources and will assist you in the <u>Assessment</u>, <u>Investigation</u>, and <u>Marketing</u> of your career plans.

Assess your interests, skills, values Investigate your educational & employment opportunities Market yourself with confidence to employers

#### Assess your personality, interests, skills and values:

**Career Assessment Tests On-line** 

Find valuable information about who you are, how you prefer to work and jobs that others like you have found satisfying and rewarding.

- Discover
- Myers-Briggs Type Indicator
- Arizona Career Information System
- Strong Interest Inventory

#### Investigate educational and employment opportunities:

Information available to help you Investigate...

Job Descriptions - Labor Market Information - College Majors - Colleges/Universities - Companies - Financial Aid/Scholarships

#### Marketing

**Resources to assist you in Marketing yourself in the world of work...** Resume Writing – Interviewing Techniques – General and On-Line Job Search Strategies

#### Job Search

Phoenix College is part of the Maricopa Career Network (www.maricopa.edu/careers), an Internet job service that is used by all 10 of the Maricopa County Community Colleges and thousands of local employers. Search for jobs on-line and submit your resume electronically.

Internet access to other local and national job listings.

#### Other Job Search Services Include:

- On-campus job openings -- Federal Work Study positions, and student budget positions
- On-campus employer recruitment
- Workshops on Job Search, Resume Writing, Interviewing, and Employability Skills
- Semi-annual Career/Job Fair (Spring & Fall)
- Faxing of resumes, cover letters and applications to employers
- Career counseling available by appointment or walk-in basis
- Career Work Experience program
- Virtual Career Center at <u>www.phoenixcollege.edu/careercenter</u>

#### Hours:

Monday - Thursday: 7:30 a.m. - 7:00 p.m. Friday: 7:30 a.m. - 4:00 p.m. Summer Hours vary.

The Career Services Center is located in the northwest corner of the Hannelly Center, in Room HC-126

### **Residential Faculty & Administration**

(First Year of Service to MCCCD)

ADAMSON, THOMAS (1990) Mathematics -B.S., Bemidji State University; M.S.T., Illinois Institute of Technology.

ALLEN, JAMES E. (1995) English –B.A., Goddard College; M.F.A., Vermont College.

AMADOR, FRED L. (2001) Counseling –B.A., M.C., Arizona State University.

ANDERSON, KRISTIN (1981) Dental Hygiene –B.S., Marquette University; R.D.H., M.A., Northern Arizona University.

ANDERSON, MARILYN A. (1987) Business –B.S., Mesa College; M.B.A., University of Phoenix; C.P.A., Arizona.

ARLE, JOHN F. (1993) Biology -B.S., M.Ed., Arizona State University.

ARQUETTE, JEANNE (1994) Chemistry -B.S., M.S., Louisiana State University

BATTLE, AL (2004) Business –B.A., M.B.A., University of Phoenix.

BOLTON, CAROL J. (1991) Communication -B.A., M.A., University of Arkansas, Fayetteville.

BOND, MINYON L. (1984) Biology –B.S., M.S., Northwestern State University.

BROMLEY, RAYMOND (1991) Social Science –B.A., M.A., Ph.D., University of California at Los Angeles.

BRYAN, TIMOTHY M. (1990) Mathematics -B.S., California State University, San Bernardino; M.A., California State University, Long Beach.

BURGESS, GERALD (1999) Theatre –B.A., B.F.A., University of Washington; M.A., Arizona State University.

BURSH, EULA RILEY (1980) Mathematics –B.S., Southern University; M.N.S., Arizona State University; Ed.D., Nova Southeastern University.

CANEZ, OFELIA (2001) Education –A.A., Mesa Community College; B.A., Arizona State University; M.Ed., Northern Arizona University.

CARNAHAN, DARRELL (1998) Computer Information Systems –A.A.S., Salt Lake City Community College; B.A., University of Utah; M.S., Arizona State University.

CELOZA, ALBERT (1988) Social Science –B.A., M.P.A., University of the Philippines; M.A., University of San Francisco; M.A., Ph.D., Claremont Graduate University.

CHAMBERS, KURT (1998) Learning Technologies and Development -B.S., Brigham Young University; M.S., University of Utah, Provo, Utah.

CHAVEZ, ENRIQUETA (1997) Counseling -B.A., Arizona State University; M.A., Northern Arizona University.

CHAVEZ, MATILDA D. (2001) Nursing –B.S.N., Arizona State University; M.S.N., Case Western Reserve University. CLARK, LOMAN B. (2000) Counseling – B.S., M.Div., M.C., Arizona State University.

CLOUD, CINDY L. (1989) Business –A.A., Glendale Community College; B.S., M.B.A., Arizona State University.

COTTER, ROBIN L. (2005) Biology - B.A., DePauw University; Ph.D., University of Nebraska Medical Center.

CROSS, KATHERYN A. (2003) English –A.B., M.P.A., Indiana University; J.D., George Mason School of Law; A.R.M., American Institute for Chartered Property Casualty Underwriters.

CUPS, RICHARD (1982) Physics, Engineering –A.A.S., Luzerne County Community College; B.S., The Pennsylvania State University; M.T., Arizona State University.

DENNIS, DEBORAH S. (1983) Health Information Technology –B.S., Louisiana Tech University; M.Ed., Northern Arizona University.

**DeWITT, PAMELA K.** (2004) Nursing B.S.N., Arizona State University; M.S., University of California, Los Angeles.

DIMAS, PETE (1990) Social Science –B.A., M.A., Ph.D., Arizona State University.

DORR, DEBRA (1996) Industrial Technology -A.A.S., Phoenix College; B.S., M. Ed., Arizona State University.

DOUBLEDAY, DALE (2003) Art -B.S., M.Ed., Arizona State University.

DOWD, LINDA (2000) English -B.S., M.A., Northern Arizona University.

DYER-HURDON, MICHELLE M. (2002) Library –B.A., Oakland University; M.S., Wayne State University.

ENCISO, MARIA D. (1991) Foreign Language -B.S., M.A., Northern Arizona University.

ERMOIAN, DEBORAH (1999) Mathematics -B.S., Grand Canyon University; M.Ed., Ph.D., Arizona State University.

EROE, GEOFFREY M. (1976) Theatre –B.A., M.A., University of Northern Colorado; Ph.D., Stanford University.

ESCALANTE, DELIA P. (1976) Foreign Language -B.A., M.A., University of Arizona.

ETCHART, MARTIN (1995) English –B.A., M.F.A., Arizona State University; Ph.D., The Union Institute.

EWALD, BONNIE (2001) Nursing –B.S.N., University of Wisconsin - Milwaukee; M.S., Arizona State University; M.P.H., University of Arizona.

FAWCETT, IRENE M. (1998) Nursing B.A., Notre Dame College of Ohio; M.S N., University of Phoenix.

FERRAR, KATHLEEN A. (1993) H.E.L.P. (Health Enhancement Lifetime-Activities Program) –A.S., Central Arizona College; B.A., Jameston College; M.S., South Dakota University.

- FISHER, MATTHEW (2000) Business B.A., Brigham Young University; M.A., University of Arizona; C.P.A.
- FLADHAMMER, DANA (1997) Applied Business -B.A.E., M.Ed., Arizona State University.
- FLANIGAN, KAREN (1999) Nursing -B.S.N., M.S., Arizona State University.
- FOSTER, VIRGINIA R. (1968) Foreign Language –B.A., M.A., Ph.D., University of Missouri.
- FRANK, BETSY A. (1990) Reading –B.A., Arizona State University; M.Ed., University of Arizona; Ed.D., Nova Southeastern University.
- GALLOWAY, LAURA (1987) Communication/Theatre Arts –A.A., Lake Forest College; B.A., M.A., M.C., Arizona State University.
- GARCIA, LINDA (1991) Dental Hygiene -A.A., Phoenix College; B.S., M.Ed., Northern Arizona University.
- GARNER, BRAD (2003) Mathematics –B.S., Brigham Young University; M.A., Ph.D., University of Maryland.
- GARRISON, TERRY A. (2004) EMT/Fire Science -A.A.S., Phoenix College; B.S., Ottawa University; M.Ed., Northern Arizona University.
- GEDDIS, DIANNE (2002) Health Enhancement -A.A., Phoenix College; B.A., M.S., Arizona State University.
- GEDDIS, SCOTT (1984) Health Enhancement -A.A.S., Phoenix College.
- GIBNEY, MARIAN (1983) Psychology –B.A., Queens College; M.A., Fordham University; Ed.D., Nova Southeastern University.
- GOLISCH, PAUL (2005) Associate Dean -B.S., Valparaiso University; M.Ed., National-Louis University
- GREEN, KATHRYN (1977) Applied Business -B.S., M.A.C.T., S.C.T., Murray State University.
- HABERMAN, JUDITH (1990) English -B.S., Northern State University; M.A., University of Oklahoma.
- HALFORD, SHARON (2004) Associate Dean B.S., M.A., University of Colorado.
- HATHY, SANDRA (2001) Business -A.A., Phoenix College; B.S., M.B.A., Arizona State University.
- HAUERT, SCOTT A. (1998) Legal Studies –B.S., Embry-Riddle University; M.B.A., University of New Mexico; J.D., University of Dayton.
- HILDER, KAY (1999) American Sign Language –B.S., University of Nebraska; M.S., Western Maryland College; M.A., Arizona State University; CI/CT, Registry of Interpreters for the Deaf
- HODGKINS, ANNE V. (1994) Mathematics –B.S., University of North Texas; M.S., Ed.D., Texas A & M University at Commerce.
- HOPKINS, MARSHA ANN (1973) Social Science -B.A., M.S., Southern Illinois University.

HOUSER, HELEN J. (2001) Health Care Education –B.A., University of Phoenix; M.S.H.A., University of Colorado.

- HUGHES, BILLIE J. (2005) Learning Technologies and Development -B.A., M.L.S., University of Arizona; Ph.D., Arizona State University.
- JAMESON, BRENT L. (1972) Foreign Language –B.A., M.A., Brigham Young University.
- JENKINS, BEVERLY (2001) Business -B.A., M.C.S., Arizona State University.
- JOHN, HERSHMAN R. (1999) English, American Indian Studies -B.A., M.F.A., Arizona State University.
- JOHNSON III, MORRIS F. (1987) Vice President Student Affairs -B.A., Dubuque University; M.S.W., University of Iowa.
- JOHNSSON, KENNETH N. (2000) Emergency Medical Technology. B.S., Charter Oak State College; NREMT-P.
- JONES, JR., WILLIE J. (1999) Applied Business –B.S., M.A., M.Ed., Arizona State University; M.A., University of Phoenix.
- KAKAR, CASANDRA (1995) Interim Vice President, Academic Affairs
  B.A., Texas Tech University; M.B.A., Arizona State University.
- KAPPES, DEBORAH (1998) Dental Hygiene -A.A., Phoenix College; B.S., M.P.H., Arizona State University.
- KIMBUENDE, JOSEPH (2000) English – B.A., National University of Zaire; M.A., M.Ed., Ed.D., Northern Arizona University.
- KISIEL, LUCIA M. (2000) Mathematics –B.S., M.Ed., Northern Arizona University.
- KORKAMES, GAIL (1992) Business –B.A., California State University at Northridge; M.B.A., M.S., University of Texas at Dallas.
- KURTH, LINDA A. (1984) Applied Business –B.S., M.S.T., University of Wisconsin, Whitewater; Ph.D., Arizona State University.
- KURTZ-WEIDINGER, DEBORAH (2003) Dental Hygiene –R.D.H., B.A., Ohio State University; M. Ed., Arizona State University.
- LAIRD, DAVID (1998) Library –B.A., Arizona State University; B.S.Sc., M.S., Queen's University, Belfast, Northern Ireland.
- LEAL, SANDRA (2004) Social Work, Sociology, Women's Studies –B.A., Howard Payne University; M.S.S.A., Case Western Reserve University.
- LEE, SEUNG-JOO (1997) Chemistry –B.S., M.S., Kyung-Hee University; Ph.D., Arizona State University.
- LEWIS, KATHRYN M. (1988) Emergency Medical Technology/Fire Science –B.S.N., M.Ed., Arizona State University; Ph.D., Walden University.
- LI, SUI-LIN (1989) Mathematics -B.A., Providence College; M.S., University of Cincinnati.

LIGON, ELIZABETH (1998) Health Enhancement –B.S., Northern Arizona University; B.S.N., Grand Canyon University; M.S., Arizona State University.

LITTLE, BRET (2003) Administration of Justice –B.S., Weber State University.

LOWE, MONICA (1984) Counseling -B.A., M.A., Ph.D., Arizona State University.

- LUCAS, STEPHEN (1987) Reading –B.A., Missouri South State College; M.S.Ed., Southwest Missouri State University.
- MACIAS, MARGARET (1993) Counseling –A.A., Gateway Community College; B.S.W., Arizona State University; M.A.E., Ed.D., Northern Arizona University.
- MARIN, AMY J. (1995) Psychology –B.A., University of California, Irvine; M.A., Ph.D., Arizona State University.
- MARKS, JOYCE LYNN (1976) Library –B.A., University of Illinois; M.L.S., Western Michigan University.

MARTI-SUBIRANA, ANNA (2001) Biology -B.S., Ministry of Education and Science, Spain; M.S., Ph.D., Universitat Autonoma de Barcelona, Spain.

- MARTINEZ, CLEOPATRIA (1985) Mathematics –B.A., University of Denver; M.A., Ph.D., University of Colorado.
- MATTE, NANCY L. (1994) English –B.A., M.A., M.C., Ph.D., Arizona State University.
- McCLYMONDS, MARIANNA E. (1982) Mathematics -B.S., M.A., University of Georgia.
- McDANIEL, Jr., BILLY GENE (2004) EMT/Fire Science -A.A.S., Mesa Community College; B.S., Charter Oak State College.
- McINTYRE, PATRICIA E. (1991) Counseling –A.A., San Diego Community Colleges; B.A., M.S.C.N.E.D., San Diego University.
- MERKEL, KORY (1997) Mathematics –B.A., Evergreen State College; M.A.T., Northern Arizona University.
- MIEHLS, DONALD (1995) Social Science –B.A., Aquinas Institute; B.S., Armed Forces Institute; Lic., Laval University; M.A., Loyola, Aquinas Institute of Theology, Chicago Pontifical Institute; Ph.D., Texas Christian University.
- MEYERS, NANCY (2002) ESL/English -B.A., M.A., Arizona State University.
- MILLER, LISA (1981) English –B.A., M.A., Ph.D., University of Missouri.
- MILLER, PAMELA (2001) Mathematics –B.A., University of California at Santa Cruz; M.A., Ed.D., Northern Arizona University.
- MIRELES, JESSE (1987) Industrial Technology –A.A.S., San Jacinto College; B.S., M.Ed., Ed.D., University of Houston.
- MITCHELL, MICHAEL B. (1991) English –B.A., Dallas Baptist University; M.A., University of Texas at Arlington.

- MOORE, JAMES D. (1994) Vice President, Administrative Services –B.S., Arizona State University; M.A., Ed.D., Northern Arizona University.
- NAVARRETE, NANCY (2004) Counseling –A.A.S., Mesa Community College; B.A., M.Ed., Northern Arizona University.
- NELSON, WILBERT (1996) Associate Dean –A.A., El Centro College; B.S.W., East Texas State University; M.S.W., Arizona State University.
- **O'BRIEN, ELIZABETH** (1990) Communication and Theatre –B.A., University of Arizona; M.A., University of Maryland.
- OFFENBERG, LINDA (2001) Business -B.S., University of Cincinnati; M.Ed., Lesley College.
- ONG, EDDIE W. (2002) Chemistry –B.S., Ph.D., Arizona State University.
- ORTEGA, CINDY (1998) Reading -B.A., M.A., California State University, Long Beach.
- PARKER, VERONIQUE M. (2004) Health Enhancement -A.A., Clovis Community College; B.A., M.A., Eastern New Mexico University; M.A., University of Phoenix.
- PEPE, PHILIP (1984) Biology –B.S., S.U.N.Y. at Stony Brook; M.S., Ph.D., University of Southern California.
- PERRY, RITA H. (2001) Dental Assisting – A.A.S., Phoenix College; B.S., M.P.A., Arizona State University; R.D.H., C.D.A.
- PETERSON, NELIA (1996) Nursing –B.S.N., University of Santo Tomas, Manila, Philippines; M.N.E., University of Phoenix.
- **PETTERSON, BONNIE J.** (1993) Health Information Technology –B.S., M.S., University of Wisconsin-Milwaukee; Ph.D., Arizona State University.
- PFEFFERBAUM, ROSE (1972) Gerontology –A.A., Phoenix College; B.A., Pomona College; M.A., University of California at Los Angeles; Ph.D., Certificate in Gerontology, Arizona State University; M.P.H., University of Washington.
- PHILLIPS, SYLVIA A. (1975) Applied Arts and Human Sciences -B.A., M.A., Arizona State University.
- PINEDA, DAVID (1995) English –B.A., M.F.A., Arizona State University; Ph.D., The Union Institute.
- POTTS, KAREN A. (2004) Legal Studies –B.S., Northern Arizona University; J.D., Arizona State University.
- PRICE, RONALD D. (1967) Business -B.S., M.B.A., Eastern New Mexico University; C.P.A., Arizona.
- REDENDO, ANTHONY P. (2001) Applied Arts & Human Sciences –A.O.S., Culinary Institute of America, B.S., University of Phoenix.
- REED, PAMELA (1996) Art –A.A., Glendale Community College; B.A., M.A., Arizona State University.
- REYES, ROMAN (1978) Art
  - -B.S., Arizona State University; M.I.M., American Graduate School of International Management.

RICHARDSON, DONALD J. (1971) English –B.A., M.A., Fort Hays State University; Ph.D., Arizona State University.

RIGGS, THOMAS (2002) Interpreter Preparation Program –B.S., Metropolitan State College; M.A., University of Colorado; ASLTA Professional Certification, National Association of the Deaf.

**ROBERTS, KENNETH** (1990) Applied Arts & Human Sciences –B.S., University of Minnesota; M.A., Washington State University.

ROBINSON, SCOTT (1997) Applied Arts & Human Sciences –A.O.S., Culinary Institute of America; A.A.S., Scottsdale Community College; B.A.M., University of Phoenix; C.C.E., C.E.C., American Culinary Federation; C.H.E., American Hotel/Motel Association.

ROE, CRISTIE E. (1990) English –B.A., Arizona State University; M.A., Monterey Institute of International Studies; Ph.D., University of Arizona.

**ROE, WILLIAM** (1984) Psychology –B.A., M.A., California State University at Northridge.

ROECKLEIN, RENEE M. (1990) Psychology –A.A., Mesa Community College; B.S., M.A., Ph.D., Arizona State University.

ROGERS, PAMELA K. (1998) English –B.A., M.A., Northern Arizona University.

ROSATI, MARK A. (1993) Biology –B.S., M.S., Eastern Michigan University.

ROSELLE, ANN M. (2001) Library –B.A., University of Vermont; M.A., Northwestern University; M.L.S., University of Illinois.

SALIBA, ELIZABETH (1998) Library –B.A., Scripps College, Claremont, California; M.L.S., University of California, Berkeley.

SANCHEZ, DAVID (2000) Emergency Medical Technology – B.S., Charter Oak State College; C.E.P.

SANDOVAL, JOSE (TRINO) (1997) Interim Associate Dean –B.A., California State University at Chico; M.A., Ph.D., Arizona State University.

SCOTT, ROD (2000) Reading –B.A., M.Ed., Arizona State University.

SHAW, DENNIS (1991) Mathematics –B.S., Greenville College; M.A., Arizona State University; M.A., Ohio State University.

SHEEHAN, DENNIS (1995) Applied Business –B.S., Ferris State University; M.A., Eastern Michigan University.

SIMPSON, GREG (2004) Business –B.S., University of Maryland; M.A., Webster University.

SISNEROS, DOROTHY (1991) H.E.L.P. (Health Enhancement Lifetime-Activities Program) –B.S., University of Arizona; M.S., University of Wisconsin-LaCrosse; M.B.A., University of Phoenix.

SODERMAN, EDLYN A. (1987) Legal Studies -A.A., Phoenix College; B.A., J.D., Arizona State University. SOLAND, LINDA R. (2004) Library - B.S., Austin Peay State University; M.L.S., George Peabody College for Teachers.

SOLLER, SARA THORNHILL (1990) Communication and Theatre -B.F.A., Ohio University; M.A., University of Kansas; Ph.D., Northern Arizona University.

SOLLEY, ANNA (1976) Acting President, Phoenix College -B.A., M.A., Ed.D., Arizona State University.

SOUDERS, MARGARET (1987) Nursing -B.S.N., M.S., Arizona State University.

SOUSA, JAMES (2002) Mathematics –B.A., Sonoma State University; M.S., California State University at Hayward.

SPEED, DONALD K. (1985) Physics, Astronomy, Geology -B.A., Bard College; M.S., University of Arizona.

STARK, DIANE (1997) Business –B.B.A., University of Wisconsin, Eau Claire; M.B.A., Arizona State University.

STEELE, CYNTHIA (1997) Counseling -A.A., Pima Community College; B.A.E., M.C., Arizona State University.

STIAK, JULIE (2002) Health Care Education -B.S., M.Ed., Arizona State University.

SUEYOSHI, JOE (1991) Mathematics -B.A., University of California at Berkeley; M.S., University of Minnesota.

SUNG, HSIAO-HUA (1986) Mathematics –B.A., Fu-Jen Catholic University; M.S., Texas Tech University; M.A., University of Kansas.

SUTTON, VIRGINIA S. (1994) English –B.A., Goddard College; M.A., Northeastern Illinois University; M.F.A., Vermont College, Montpelier.

TANKERSLEY, CATHERINE M. (1985) Phlebotomy -B.S., New Mexico State University, C.L.S.

TATE, PHILIP (1984) Biology –B.S., B.A., M.A., San Diego State University; D.A., Idaho State University.

THORPE, STEVE G. (2001) Social Science –B.A., M.A., Ph.D., University of Colorado, Boulder.

TOVAR-NOVASAD, MARIA T. (2001) Administration of Justice - B.S., Grand Canyon University.

VANDE PUTTE, SUZANNE (1990) Nursing -B.S.N., M.S., M.P.H., Arizona State University.

VAZQUEZ, JULIAN (1999) Foreign Language –B.A., M.A., Ph.D., Arizona State University.

VIERA, CYNTHIA L. (1991) Sociology, Women's Studies –B.S., M.A., Ph.D., Arizona State University.

VILLARREAL, ANDREA M. (2004) Applied Arts and Human Sciences -B.S., M.S., Oregon State University.

VILLEGAS, AMALIA (1998) Counseling –B.A., Arizona State University; M.Ed., Texas Technical University; Ph.D., Arizona State University.

- VINES, MARGARET (2004) ), Nursing -B.S.N., Queen's University of Charlotte; M.S. N., University of Phoenix.
- WALKER, ROLAND McALLEN- (2001) Education –A.A., Northland Pioneer College; B.S., B. A., M.Ed., Northern Arizona University; J.D., Arizona State University.
- WELLS, SANDRA (1995) Learning Technologies and Development –A.A., A.A.S., Glendale Community College; B.S., Grand Canyon University; M.Ed., Arizona State University.
- WESTENBERG, CAMILLA (1986) English –B.S., Arkansas A.M. & N. College; M.A., Arizona State University; Ed.D., Nova Southeastern University.
- WHEELER, JENNIFER (2002) English, Foreign Language -B.S., Northern Arizona University; M.A., Arizona State University.
- WHITE, JAMES J. (2004) Chemistry -B.A., Idaho State University; M.S., Ph.D., University of Arizona.
- WILBURN, JANET (1995) Dental Assisting –A.S., San Diego Mesa College; B.S., Texas Woman's University; C.D.A.

WILLIAMS, WILLIAM (2004) Administration of Justice

- WILSON, MICHAEL (1997) Social Science –A.A., San Jacinto College; B.A., M.A., Ph.D., University of Houston.
- WILSON, RICHARD (2000) Administration of Justice –A.A.S., Phoenix College; B.G.S., M.Ed., Northern Arizona University.

YOES, MILAS W. (1999) Music –B.M.E., Sam Houston State University; M.M., University of Arizona; D.M.A., Arizona State University.

ZACCARDO, PATRICIA (2000) English –B.A., City College of New York; M.A., Loyola University; Ph.D., City University of New York.

#### Emeritus Faculty & Administration (Years of Service to MCCCD)

ALNUTT, JOHN C. (1954-1978) English, Mathematics, Emeritus

ANDERSON, WILLIAM N. (1962-2002) Physics, Geology, Astronomy, Engineering, Emeritus

AWE, FLORETTA S. (1960-1983) District Director, Allied Health & Nursing, Emeritus

BAILEY, LOWELL, JR. (1965-1989) Physical Education, Emeritus

BAIZ, LUIS (1970-2001) Art, Emeritus

BENHAM, MILFORD J. (1946-1983) Physics, Geology, Emeritus

BERRY, WILLIAM E. (1971-1988) President, Emeritus

BLAKE, WILBERT (1970-1998) Social Science, Emeritus

BOGUE, JAMES W. (1960-1982) Library, Emeritus

BOSCHULT, J. M. (1973-2004) English, Emeritus

BOULET, MARY O. (1953-1983) Physical Education, Emeritus

BOUTELLE, KATHERINE M. (1966-1989) English, Emeritus

BRATT, MARION (1976-1989) English, Emeritus

BRUCE, SHIRLENE M. (1976-1997) Applied Business, Emeritus

BRUNDAGE, JOE R. (1946-1973) Engineering Technology, Emeritus

BUZZARD, CHARLES E. (1965-1989) Mass Communications, Emeritus

CALHOUN, J. D., JR. (1946-1983) Technology, Physics, Emeritus

CARPENTER, AFTON J. (1963-1983) Reading, Emeritus

CHECHE, NANCY J. (1974-2000) Biology, Emeritus

CHRISTEN, KAREN (1980-2003) Dental Hygiene, Emeritus

CLIFTON, LORAYNE (1961-1983) Nursing, Emeritus

COFFEEN, CLIFF G. (1962-1987) Social Science, Emeritus

COLE, DALE L. (1961-1989) Physics, Engineering, Emeritus

CULMER, CARITA M. (1971-1999) Library, Emeritus

DAMERON, LOGAN D. (1966-1992) Library, Emeritus

DANIELSEN, THOMAS L. (1968-2001) Biology, Emeritus

DECKER, JESSE SMITH (1946-1973) Chemistry, Emeritus

DILLARD, GEORGIA (1973-1999) Library, Emeritus

DRISCOLL, JOHN EDWARD (1970-1990) English, Emeritus

DUTTON, ALLEN A. (1961-1982) Art, Photography, Emeritus

EVANS, SETH PARKER (1958-1989) Business, Emeritus

EYGENDAAL, JAN (1976-2001) Dental Assisting, Emeritus

FERNIE, ROBERT W. (1975-2002) Psychology, Emeritus

FIELDEN, JOHN R. (1961-1986) Social Science, Emeritus

FITZGERALD, EUGENIA (1982-2002) Mathematics, Emeritus

FROST, CHALMA R. (1965-1989) Music, Emeritus

GOLDBERG, RICHARD B. (1964) Social Science, Emeritus

HALNAN, HELEN H. (1959-1983) Psychology, Emeritus

HANSON, JOHN C. (1973-1995) Counseling, Emeritus

HATLEY, J. T. (1965-1989) English, Emeritus

HILL, MYLES (1963-1991) Social Science, Emeritus

HOGAN, THOMAS E. (1959-1983) Physical Education, Emeritus

HOLTFRERICH, MAURICE D. (1966-1992) Mathematics, Emeritus

HOWARD, WILLARD W. (1961-1989) Social Science, Emeritus HUARD, DONALD V. (1963-1989) Psychology, Emeritus HUNGERFORD, ROBERT D. (1963-1983) Business, Emeritus INGRAHAM, JAMES A. (1968-1992) Business, Emeritus JACKSON, LILLIAN (retired 1969) Nursing, Emeritus JAMIESON, GAIL M. (1968-1992) Art, Emeritus JOHNS, SYLVIA (1989-2002) American Sign Language, Emeritus JOHNSON, ANN (retired 1972) Psychology, Emeritus JONES, A. LOUISE (1971-1992) Nursing, Emeritus JONES, LOYAL H. (1949-1983) Biology, Emeritus JUDD, GERARD F. (1965-1992) Chemistry, Emeritus KACZUR, PAUL (1971-1997) Mathematics, Emeritus KASS, EMIL L. (1965-1989) Counseling, Emeritus KENNEDY, JAMES R. (1975-1999) Biology, Emeritus KING, JACK L. (1965-1988) Business, Emeritus MARICH, MARTIN (1960-1983) Physical Education, Emeritus MARSHALL, PAUL E. (1951-1978) Business, Emeritus McGILVRA, MARTHA A. (1963-1983) Business, Emeritus McLAIN, JOYCE D. (1966-1989) Physical Education, Emeritus McLEAN, KATHERINE (1957-1989) Chemistry, Emeritus MERCER, JOHN (1982-2003) Photography, Emeritus MILLAM, MICHAEL J. (1966-1996) Chemistry, Emeritus

MILLER, RICHARD B. (1966-1986) English, Emeritus

MILLS, GILBERT (1947-1983) Physics, Geology, Engineering, Emeritus

MONROE, MARSHALL (1940-1966) Foreign Languages, Emeritus

NAPLES, DOROTHY J. (1963-1984) Physical Education, Emeritus

NAUMOFF, HAROLD (1966-1995) Psychology, Emeritus

NICHOL, JOHN S. (1967-2000) Counseling, Emeritus

NOBLE, VIRGINIA L. (1966-1989) Counseling, Emeritus

NUNEZ, TONY (1970-1992) Counseling, Emeritus

OEHMKE, ANN (1962-1986) Physical Education, Emeritus

O'MALLEY, W. M. (1966-1988) Biology, Emeritus

ORMAN, ARTHUR (1965-1987) English, Emeritus

PAUL, JOHN W. (1948-1983) Speech, Theatre Arts, Emeritus

PHELPS, WILMA A. (1935-1972) Library, Emeritus

POLICHINO, LOUIS M. (1956-1977) Speech, Emeritus

POORE, KATHLEEN G. (1973-1992) Music, Emeritus

POWELL, CONRAD D. (1963-1983) Counseling, Emeritus

PYFROM, SARA GAYLE (1973-1989) Communication / Theatre Arts

REPP, ANN (1972-1992) Physical Education, Emeritus

**ROBERTS, WILLIAM R.** (1967-1997) H.E.L.P. (Health Enhancement Lifetime-Activities Program), Emeritus

ROWE, RICHARD F. (1964-1997) Geography, Geology, Emeritus

SCHNECK, VERNON G. (1962-1986) Business, Emeritus

SHARPE, CHARLES K. (1948-1977) Audiovisual Services, Emeritus

SHAVER, FRED W. (1966-1989) Technology, Emeritus

SHINDLER, ANNE W. (1959-1983) Business, Emeritus

SIMMONS, BETTE RUTH (1966-1989) Business, Emeritus

SOLLER, LARRY S. (1971-1997) Communication / Theatre Arts, Emeritus

SPRAGUE, MILDRED (1970-1997) Nursing, Emeritus

SULLIVAN, ROBERT M. (1968-1999) Social Science, Emeritus

TADANO, MARIAN Y. (1973-2004) Dean of Instruction, Emeritus

TEPE, PAULINE F. (1966-1989) Biology, Emeritus

VAN SITTERT, BARBARA C. (1962-1998) English, Emeritus

VERONDA, CARLO (1971-1997) Music, Emeritus

WALDRON, WILFRED R. (1966-1989) Foreign Language, Emeritus

WALLACE, WILLIAM B. (1961-1989) Dean of Administrative Services, Emeritus

WALTERS, JAMES D. (1975-2002) Learning Technologies and Development, Emeritus

WEISS, ELMA STECK (1961-1983) Physical Education, Emeritus

WESLER, WARREN (1963-1983) Social Science, Emeritus

WILF, SELMA (1975-1996) Reading, Emeritus

# Retired Faculty & Administration

(Years of Service to MCCCD)

AGIN, AVIS (1966-1981) Reading ARNOLD, CATHERINE L. (1965-1973) Home Economics AVILA, ELZA S. (1973-1992) Counseling BARNES, VIRGINIA (1989-2002) Anthropology, Religious Studies BANKHEAD, HUGH L., JR. (1965-1983) Technology BRADSHAW, GORDON (1961-1979) Biology

BROUCH, VIRGINIA (1998-2002) Art

BROWN, ALMA (1977-1987) Home Economics

BUGH, GINNEY (1996-2000) Communication/Theatre Arts

COPE, DOROTHY A. (1984-2004) Applied Arts and Human Sciences

CRANDALL, JEWELL (retired 1979) Home Economics

DOLPHIN, HARRIET (1977-1989) Art

DRUDING, C. EDWIN (1965-1983) Psychology

FARRINGTON, ROSEMARIE (1968-1986) Dental Assisting

GALLAGHER, RAYMOND T. (1968-1982) English, Journalism

HACKLEMAN, RANDOLPH (1963-1976) Technology

HARRISON, MYRNA (1988-1993) President

HAUGEN, VIVIAN K. (1973-1983) Medical Records Technology

HEDGES, LOIS (1975-1983) Library

HOLMES, LUCILLE (retired 1966) Communications, English

HUGHES, J. EDMUND (1990-2003) Music

HUGHLING, WALLACE C. (1968-1981) Administration of Justice

JAMISON, JUANITA (1955-1973) English

JENNINGS, VIOLET MAY (1956-1973) Mathematics

JOFFE, IRWIN L. (1965-1983) Reading

KEENAN, CHARLES (1974-1988) Emergency Medical Technology

MACKLIN, LAURA (1961-1973) English

MAHER, MARY S. (1965-1978) English

MARLETT, ROBERT (1978-1983) Technology

McGIRR, CLARENCE (1980-1986) Research & Development

MOYER, PATRICIA H. (1978-1993) Chemistry

PETERSON, ANITA E. (1974-2000) Biology

PETERSON, EULA (retired 1973) Nursing

PHILLIPS, VIVIAN (1965-1975) Business

PRATHER, MARIANNE (1991-2004) Reading

PYFROM, SARA GAYLE (1973-1989) Communication / Theatre Arts

REINKEN, HARRISON F. (1978-1997) Business

RUSSELL, R. KEITH (1961-1980) Physics, Engineering

SAMSON, PATRICK (1983-1993) Medical Records Technology

SHEA, WINIFRED (1984-2001) Library

SHEER, PATRICIA (1970-1989) Nursing

SHUMAN, SUSAN E. (1988-2004) Business

TAYLOR, MARIAN I. (1977-1988) Business

TETTING, DANIEL W. (1990-2000) Nursing

TRAMEL, LINDA (1990-2001) Applied Arts & Human Sciences

VAN ZANTEN, WILLIAM G. (1962-1978) Chemistry

VEGA, JOSE de JESUS (1963-1976) Foreign Language, History

VELLENGA, DOROTHY (1963-1975) English

WALSH, JUDY (1991-2002) English

WEAVER, LETA (retired 1971) Library

WESTCOT, MABEL (retired 1968) Home Economics

WICH, SARAH J. (1968-1986) Nursing

WITHINGTON, HENRY (retired 1979) Social Science

#### **Phoenix College Administration**

resident, Acting
ice President, Academic Affairs, Interim Casandra Kakar, M.B.A
Associate DeanSharon Halford, M.S
Associate Dean Wilbert Nelson, M.S.W
Associate Dean, CTE, InterimTrino Sandoval, Ph.D
ice President, Student AffairsMorris F. Johnson, III, M.S.W
Associate Dean
ice President, Administrative Services James D. Moore, Ed.D
Associate DeanPaul Golisch, M.Ed

#### Maricopa County Community Colleges District Governing Board

Dr. Donald R. Campbell, President	term expires 1/2007
Mr. Ed Contreras	term expires 1/2007
Mr. Scott Crowley, Secretary	term expires1/2009
Ms. Linda B. Rosenthal	term expires 1/2009
Mr. Jerry Walker	term expires 1/2011

#### **District Administration**

ChancellorRufus Glasper, Ph.D.
Acting Vice Chancellor,
Human Resources,Peter Kushibab, J.D.
Acting Vice Chancellor,
Academic AffairsMaria Harper-Marinick, Ph.D.
Vice Chancellor, Business Services Debra Thompson, M.P.A.
Vice Chancellor, Information
TechnologiesRonald D. Bleed, M.B.A.
Vice Chancellor, Student Development &
Community Affairs Steven Helfgot, Ed.D.
Provost, Downtown Phoenix Campus José Leyba, Ed.D.
President, Chandler-Gilbert Community
CollegeMaria Hesse, M.B.A.
President, Estrella Mountain Community
College
President, GateWay Community
CollegeEugene Giovannini, Ed.D.
President, Glendale Community
CollegePhillip D. Randolph, Ed.D.
President, Mesa Community CollegeLarry K. Christiansen, Ed.D.
President, Paradise Valley Community
CollegeMary Kathryn Kickels, Ed.D.
Acting President, Phoenix CollegeAnna Solley, Ed.D.
President, Rio Salado CollegeLinda M. Thor, Ed.D.
President, Scottsdale Community
CollegeArthur W. DeCabooter, Ed.D.
President, South Mountain Community
CollegeKenneth H. Atwater, Ph.D.

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Dental Office Management
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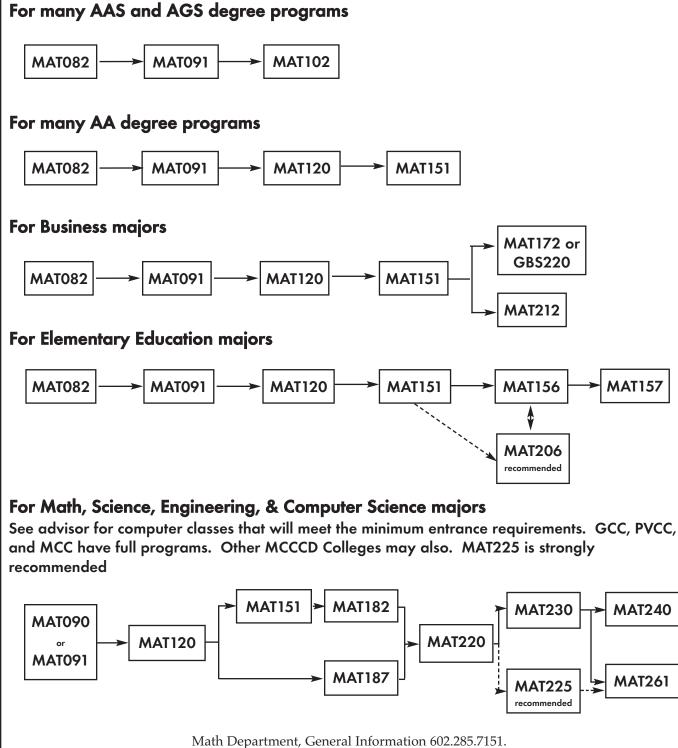
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# **MATHEMATICS FLOWCHART**

This flowchart is an information tool and is not intended to replace consultation with an advisor. Begin at the math level indicated by math placement scores and/or prior math experience.



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### HOW TO USE YOUR CATALOG

### This catalog was developed for you.

It includes information about Phoenix College programs, courses, degree requirements, policies, procedures, resources, and services.

### The focus of this catalog is on <u>your</u> success.

It provides you with the information to be a successful student. It is your responsibility to review the information and use your catalog.

### We recommend that you use your catalog in the following ways.

- Use your catalog to help you with your plans to be a successful college student. Review the Academic Calendar, Graduation Requirements, and PC Programs. Prior to selecting your courses, make certain you have the time to meet the course requirements.
- Use your catalog to learn about courses and degree requirements. Knowing what the course is about and how it will fit into your program or academic goals is one of the main requirements for proper course selection Course Descriptions begin on page 221. Whether your goal is to complete one course or an Associate Degree, Course Descriptions will provide valuable information. If you are working on completing an Associate Degree, you will need to become familiar with the General Education Degree Requirements. Degree information begins on page 74. Degree checksheets to help you keep track of your progress are available in the Advisement Center. If you are planning on completing a degree, or selecting courses prior to transferring to a four- year college or university, you will find information on the Transfer Process (pages 103-112) very helpful.
- Use your catalog to learn where and how to get things done. The catalog will help you locate resources and assist you in becoming familiar with college policies and procedures. Information is available about resources which can help you, such as Academic Advisement, Admissions and Records, Counseling and Career Services, Special Services, Financial Aid, the Learning Center, Library, and the Re-Entry Center. The Student Information section begins on page 6.
- Use your catalog to explore educational and career options available to you. The Counseling Department faculty will help you learn more about your interests, work skills, and personal goals.

