

## Nursing

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### Nursing: Maricopa Community College District Nursing Program (MCCDNP)

Advisor list and Information & Application packets are available at: [www.gc.maricopa.edu/nursing](http://www.gc.maricopa.edu/nursing)

See page 216 for complete information on MCCCD Health Care Integrated Educational System.

#### Degree/Certificate:

Certificate of Completion in Nurse Assisting  
 Certificate of Completion in Practical Nursing  
 Associate in Applied Science Degree in Nursing

#### Program Description:

The Maricopa Community College District Nursing Program (MCCDNP) is available at seven Maricopa Colleges, the Maricopa Skill Center, and the Southwest Skill Center. The nursing pathway provides multiple exit points for employment that begins with Nurse Assisting and continues to the Practical Nurse certificate and Registered Nurse degree program. The Nursing Program provides eligibility for students seeking certification and licensure through the Arizona State Board of Nursing. Licensing requirements are the exclusive responsibility of the Arizona State Board of Nursing.

The MCCD Nursing Program is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway 33rd Floor, New York, New York 10006, 212.363.5555, ext 153.

#### Program Offerings:

This program is offered at the following sites:	Phone
Gateway Community College .....	602-392-5025
Glendale Community College .....	623-845-3210
Maricopa Skill Center .....	602-238-4367
Mesa Community College .....	480-461-7106
Mesa Community College/Boswell .....	623-974-7835
Paradise Valley Community College .....	602-787-7060
Phoenix College .....	602-285-7427
Rio Salado College .....	480-517-8569
Scottsdale Community College .....	480-423-6225
Southwest Skill Center .....	623-535-2702
(Nurse Assisting Only)	

#### Waiver of Licensure/Certification Guarantee:

Admission or graduation from the MCCD Nursing Program does not guarantee obtaining a license or certificate to practice nursing. Licensure and certification requirements and the subsequent procedures are the exclusive right and responsibility of the Arizona State Board of Nursing. Students must satisfy the requirements of the Nurse Practice Act: Statutes, Rules and Regulations, independently of any college of school requirements for graduation.

Pursuant to A.R.S. § 32-1606(B)(17), an applicant for professional or practical nurse license by examination is not eligible for licensure if the applicant has any felony convictions and has not received an absolute discharge from the sentences for all felony convictions. The absolute discharge must be received five or more years before submitting this application. If you cannot prove that the absolute discharge date is five or more years, the Board cannot process your application.

All nurse and nursing assistant applicants for certification and licensure will be fingerprinted to permit the Department of Public Safety to obtain state and federal criminal history information. If there is any question about eligibility for licensure or certification, contact the nursing education consultant at the Arizona State Board of Nursing (602-331-8111).

#### Health Declaration:

It is essential that Nursing students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients' lives. Students must be able to demonstrate rational and appropriate behavior under stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application.

#### Health & Safety Requirements for MCCD Nursing Program:

1. Students must submit a completed Health and Safety Documentation Checklist and maintain current status throughout the program.
2. Students must submit CPR card for Health Care Provider and maintain current status throughout the program.
3. Health Declaration Form signed by a licensed health care provider.
4. Negative urine drug screen.

**Grade Requirements:**

Student must obtain a C grade or better or pass in P/Z graded courses in all courses in program.

**Course Fee Information:**

Please see class schedule for course fees information.

**The Nurse Assisting Pathway**

The nurse assisting pathway is designed to prepare students to complete the Nurse Assistant Certification through the Arizona State Board of Nursing to practice in a health care agency as a certified nurse assistant. Completion of the nurse assistant program of study provides job ready skills as a nursing assistant. Students may apply to the Nursing Program after completing the prerequisite courses and admission requirements.

**The Practical Nurse Pathway**

Following completion of the practical nurse level program of study, the student is eligible to apply for licensure as a practical nurse. Licensed Practical Nurses (L.P.N.) are employed in acute, long-term, and community-based health care agencies under the direction of a registered nurse. Practical Nurses function within their legal scope of practice and use professional standards of care in illness care and health promotion activities for clients and families across the life span.

**Registered Nurse Pathway**

**Associate in Applied Science Degree in Nursing Program**

The Associate Applied Science (AAS) degree in Nursing graduate is eligible to apply for licensure as a Registered Nurse (RN). The RN is educated as a generalist who delivers health care to clients and family groups and has competencies related to the art and science of nursing. The RN may be employed in a variety of acute, chronic and community based health care settings. The AAS degree in Nursing provides the graduate with an educational foundation for articulation into the university setting.

**Nurse Assisting Certificate  
8 credits**

**Admission Requirements:**

Application and acceptance into the program, High School graduate or GED, current Health Care Provider CPR card required before beginning courses.

**Program Prerequisites:** None

**Required Courses:** (8 credits)

**Credits**

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

HCC130	Fundamentals in Health Care Delivery (3)	<b>or</b>	
HCC130AA	Health Care Today (0.5)	<b>and</b>	
HCC130AB	Workplace Behavior in Health Care (0.5)	<b>and</b>	
HCC130AC	Personal Wellness and Safety (0.5)	<b>and</b>	
HCC130AD	Communication and Teamwork in Health Care Organizations (0.5)	<b>and</b>	
HCC130AE	Legal Issues in Health Care (0.5)	<b>and</b>	
HCC130AF	Decision Making in the Health Care Setting (0.5)		<b>3</b>
HCC145AA	Medical Terminology for Health Care Workers I		<b>1</b>
+ NUR156	Nurse Assisting		<b>2</b>
+ NUR157	Nurse Assisting Lab		<b>2</b>

### Practical Nursing Certificate 49.5 - 62.5 credits

#### Admission Requirements:

Application & acceptance into Nursing program, High school diploma or GED.

A reading score of 50% or higher and a math score of 50% or higher on the Nursing Entrance Exam (NET) must be achieved for admission. Retests can be taken only once in a 60 day period. The entire Nursing Entrance Exam (NET) must be taken on each retest. The test can be taken no more than 3 times in a 12 month period.

#### Program Prerequisites: (25-38 credits) Credits

**Note:** the credit hour range is subject to change depending on the student's educational experience.

+ BIO201	Human Anatomy and Physiology I	4
+ BIO202	Human Anatomy and Physiology II	4
+ BIO205	Microbiology	4
+ CHM130	Fundamental Chemistry (3) <b>and</b>	
+ CHM130LL	Fundamental Chemistry Lab (1) <b>or</b>	
	One year of high school chemistry	4
+ CRE101	Critical and Evaluative Reading I <b>or</b>	
	Equivalent by Assessment	3
+ ENG101	First-Year Composition	3
HCC130	Fundamentals in Health Care Delivery (3) <b>or</b>	
HCC130AA	Health Care Today (0.5) <b>and</b>	
HCC130AB	Workplace Behavior in Health Care (0.5) <b>and</b>	
HCC130AC	Personal Wellness and Safety (0.5) <b>and</b>	
HCC130AD	Communication and Teamwork in	
	Health Care Organizations (0.5) <b>and</b>	
HCC130AE	Legal Issues in Health Care (0.5) <b>and</b>	
HCC130AF	Decision Making in the Health Care Setting (0.5)	3
HCC145AA	Medical Terminology for Health Care Workers I	1
+ MAT120	Intermediate Algebra (5) <b>or</b>	
+ MAT121	Intermediate Algebra (4) <b>or</b>	
+ MAT122	Intermediate Algebra (3) <b>or</b>	
	Higher Level Math Course	3-5
+ NUR156	Nurse Assisting (2) <b>AND</b>	
+ NUR157	Nurse Assisting Lab (2) <b>or</b>	
	Current Nurse Assistant certification (CNA).	4
PSY101	Introduction to Psychology	3

#### Required Courses: (24.5 credits) Credits

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

+ FON241	Principles of Human Nutrition	3
+ HCR240	Human Pathophysiology (4) <b>or</b>	
+ HCR240AA	Human Pathophysiology I (2) <b>and</b>	
+ HCR240AB	Human Pathophysiology II (2)	4
+ NUR161	Nursing Process and Critical Thinking I	3
+ NUR163	Health Assessment and Health Promotion I	1
+ NUR167	Pharmacology and Medication Administration I	1
+ NUR169	Nursing Science I	3
+ NUR181	Nursing Process and Critical Thinking II	3
+ NUR185	Developing the Nurse's Role I	1
+ NUR187	Pharmacology and Medication Administration II	1.5
+ NUR189	Nursing Science II	4

### Nursing Associate in Applied Science (AAS) 74.5 - 87.5 credits

#### Admission Requirements:

High School diploma or GED, application and acceptance into the nursing program.

A reading score of 50% or higher and a math score of 50% or higher on the Nursing Entrance Exam (NET) must be achieved for admission. Retests can be taken only once in a 60 day period. The entire Nursing entrance Exam (NET) must be taken on each retest. The test can be taken no more than 3 times in a 12 month period.

The Health Education System, Inc. (HESI) test will be administered to all prospective advanced placement students seeking admission into Blocks 3 or 4. A score of 800 or higher is required in order to be granted advanced placement into either of these blocks. A score of less than 800 will result in placement into either Block 1 or 2. The final decision rests with the Nursing Program Chair at the College to which the student is accepted.

#### Program Prerequisites: (25-38 credits) Credits

**Note:** The credit hour range is subject to change depending on the student's educational experience.

+ BIO201	Human Anatomy and Physiology I	4
+ BIO202	Human Anatomy and Physiology II	4
+ BIO205	Microbiology	4
+ CHM130	Fundamental Chemistry (3) <b>and</b>	
+ CHM130LL	Fundamental Chemistry Laboratory (1) <b>or</b>	
	One year of high school chemistry	4
+ CRE101	Critical and Evaluative Reading I <b>or</b>	
	Equivalent by assessment	3
+ ENG101	First Year Composition	3
HCC130	Fundamentals in Health Care Delivery (3) <b>or</b>	
HCC130AA	Health Care Today (0.5) <b>and</b>	
HCC130AB	Workplace Behavior in Health Care (0.5) <b>and</b>	
HCC130AC	Personal Wellness and Safety (0.5) <b>and</b>	
HCC130AD	Communication and Teamwork in	
	Health Care Organizations (0.5) <b>and</b>	
HCC130AE	Legal Issues in Health Care (0.5) <b>and</b>	
HCC130AF	Decision Making in the Health Care Setting (0.5)	3
HCC145AA	Medical Terminology for Health Care Workers I	1
+ MAT120	Intermediate Algebra (5) <b>or</b>	
+ MAT121	Intermediate Algebra (4) <b>or</b>	
+ MAT122	Intermediate Algebra (3) <b>or</b>	
	Higher Level Math Course	3-5
+ NUR156	Nurse Assisting (2) <b>and</b>	
+ NUR157	Nurse Assisting Lab (2) <b>or</b>	
	Current Nurse Assistant certification (CNA).	4
PSY101	Introduction to Psychology	3

#### Required Courses: (44.5 credits) Credits

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

+ FON241	Principles of Human Nutrition	3
+ HCR240	Human Pathophysiology (4) <b>or</b>	
+ HCR240AA	Human Pathophysiology I (2) <b>and</b>	
+ HCR240AB	Human Pathophysiology II (2)	4
+ NUR161	Nursing Process and Critical Thinking I	3
+ NUR163	Health Assessment and Health Promotion I	1
+ NUR167	Pharmacology and Medication Administration I	1
+ NUR169	Nursing Science I	3
+ NUR181	Nursing Process and Critical Thinking II	3
+ NUR185	Developing the Nurse's Role I	1
+ NUR187	Pharmacology & Medication Administration II	1.5
+ NUR189	Nursing Science II	4

+ NUR261	Nursing Process and Critical Thinking III	<b>3</b>
+ NUR263	Health Assessment and Health Promotion II	<b>1</b>
+ NUR267	Pharmacology and Medication Administration III	<b>1</b>
+ NUR269	Nursing Science III	<b>5</b>
+ NUR281	Nursing Process and Critical Thinking IV	<b>3</b>
+ NUR285	Developing the Nurse's Role II	<b>1</b>
+ NUR289	Nursing Science IV	<b>6</b>

<b>HCR Courses (For ASU Students ONLY)</b>		
HCR210	Clinical Health Care Ethics	<b>3</b>
HCR220	Health Care Organizations	<b>3</b>
HCR230	Culture & Health	<b>3</b>
+ HCR240	Human Pathophysiology (4) <b>or</b>	
+ HCR240AA	Human Pathophysiology I (2) <b>and</b>	
+ HCR240AB	Human Pathophysiology II (2)	<b>4</b>

**General Studies Requirements:** (5 credits)

**Core:** (3 Credits) Credits  
**3**

**First-Year Composition:**

Met by ENG101 in Program Prerequisites area  
+ ENG102 First-Year Composition (3)

**Oral Communication**

Waived

**Critical Reading**

Met by CRE101 in Program Prerequisites area

**Mathematics**

Met by MAT120, **or** MAT121, **or** MAT122 **or**  
higher Level Math Course in Program Prerequisites area

**Distribution:** (2 credits) Credits

**Humanities/Fine Arts**

Any approved course, see page 77. **2**

**Natural Science**

Met by BIO201, and BIO202 in Program Prerequisites areas

**Social and Behavioral Sciences**

Met by PSY101 in Program Prerequisites area

### University Transfer Students

#### For students planning a University Program

Students who are planning to earn the Bachelor of Science in Nursing Degree may obtain their prerequisite courses at Maricopa Community Colleges. The following courses are suggested for meeting requirements for admission to a baccalaureate nursing program. Prospective students should check the catalog of the school to which they plan to transfer.

**CAUTION: Frequent communication with a university advisor is the best safeguard when selecting first and second year courses. Requirements may change from year to year.**

**Suggested Courses:**

+ BIO201	Human Anatomy & Physiology I	<b>4</b>
+ BIO202	Human Anatomy & Physiology II	<b>4</b>
+ BIO205	Microbiology	<b>4</b>
+ CHM130	Fundamental Chemistry (3) <b>and</b>	
+ CHM130LL	Fundamental Chemistry Lab (1)	<b>4</b>
+ CHM230	Fundamental Organic Chemistry (3) <b>and</b>	
+ CHM230LL	Fundamental Organic Chemistry Lab (1)	<b>4</b>
+ ENG101	First Year Composition (3) <b>or</b>	
+ ENG107	First Year Composition for ESL** (3)	<b>3</b>
+ ENG102	First Year Composition (3) <b>or</b>	
+ ENG108	First Year Composition for ESL** (3)	<b>3</b>
+ FON241	Principles of Human Nutrition	<b>3</b>
+ Humanities/Fine Arts Elective	– See Advisor	
+ MAT150	College Algebra / Functions (5) <b>or</b>	
+ MAT151	College Algebra / Functions (4) <b>or</b>	
+ MAT152	College Algebra / Functions (3)	<b>3-5</b>
PSY101	Introduction to Psychology	<b>3</b>
+ CFS205	Human Development (3) <b>or</b>	
+ PSY240	Developmental Psychology (3)	<b>3</b>

### Continuing Education Classes

Glendale Community College's Nursing Department offers short courses for graduate nurses to update their skills and increase their knowledge. Current non-credit courses include NCLEX Review, Basic and Advanced Critical Care, Wound Debridement, and Clinical Teaching for Nursing. New courses are created based on community interest.

## ■ ■ ■ Course Descriptions ■ ■ ■

### Nursing (HCC, HCR, NCE, NUR)

#### Health Core Curriculum (HCC)

**HCC109 CPR for Health Care Provider** **.5 credit .5 period**  
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 automated, external defibrillation and resuscitation equipment. Prerequisites: None.

**HCC130 Fundamentals in Health Care Delivery** **3 credits 3 periods**  
Overview of current health care professions including career and labor market information. Health care delivery systems, third party payers, and facility ownership. Health organization structure, patient rights and quality care. Health care and life values. Definition and importance of values, ethics, and essential behaviors in the workplace. Worker rights and responsibilities. Healthful living practices to include nutrition, stress management and exercise. Occupational Safety and Health Administration (OSHA) standard precautions and facility safety. Use of principles of body mechanics in daily living activities. Basic communication skills which facilitate teamwork in the health care setting. Focus on development of personal communication skills and an understanding of how effective communication skills promote teamwork. Focus on intercultural communication strategies. Prerequisites: None.

Programs and Courses

**HCC130AA Health Care Today** .5 credit .5 period  
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. Prerequisites: None.

**HCC130AB Workplace Behaviors in Health Care** .5 credit .5 period  
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** .5 credit .5 period  
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** .5 credit .5 period  
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** .5 credit .5 period  
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** .5 credit .5 period  
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.

**HCC145AA Medical Terminology for Health Care Workers I** 1 credit 1 period  
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.

### Health Care Related (HCR)

**HCR210 Clinical Health Care Ethics** 3 credits 3 periods  
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  
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  
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  
Chemical, biologic, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: BIO202 or equivalent.

**HCR240AA Human Pathophysiology I** 2 credits 2 periods  
Chemical, biologic, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: BIO202 or equivalent.

**HCR240AB Human Pathophysiology II** 2 credits 2 periods  
Chemical, biologic, biochemical, and psychological processes as a foundation for the understanding of alterations in health. The structural and functional pathophysiology of alterations in health; selected therapeutics considered. Prerequisites: HCR240AA.

### Nursing: Continuing Education (NCE)

For Information: Diane Kruse  
Phone: 623.845.3207

**Note:** A variety of **Continuing Education** classes are offered each semester – check the class schedule for listings.

**NCE203 Interpretation of Laboratory Diagnostic Examinations** .5 credit .5 period  
Utilization of laboratory diagnostic examination results for evaluation of patient conditions. Normal results for selected body fluids. Abnormal results related to pathophysiological conditions of adults. Incorporation of results of examinations to assess, modify, and evaluate therapy for patients with specific conditions. Prerequisites: Registered Nurse or Licensed Practical Nurse, Nursing students, or permission of instructor.

**NCE204 Hemodynamics 1 credit 1 period**

Events of the cardiac cycle related to normal hemodynamic waveforms and pressures. Purpose, procedure and potential complications related to hemodynamic invasive lines. Trouble shooting and preventative procedures for hemodynamic invasive lines. Normal and abnormal pressure forms related to various forms of pathophysiology. Treatments and interventions for specific cardiac diseases. Impact of paced rhythms, and intraaortic balloon pumps on normal hemodynamic waveforms. Safe removal procedure for hemodynamic devices. Prerequisites: Registered nurse (RN), respiratory therapist, or cardiovascular technician with knowledge of dysrhythmia recognition.

**NCE206 Trauma Nursing 1 credit 1 period**

Foundation in trauma for nurses interested in caring for trauma victims. Includes mechanism of injury, assessment, pathophysiology and management of clients with blunt or penetrating injuries to the following: head, spinal cord, musculoskeletal, chest, abdomen, kidneys. Includes trauma in special populations: pregnant trauma victim, pediatric, and elderly victims. Prerequisites: Current license as a Registered Nurse with one-year critical care or emergency department experience, or permission of the instructor.

**NCE214CA Interpretation of Cardiac Arrhythmias 1 credit 1 period**

Focuses on common cardiac arrhythmias. Includes abnormalities in regard to the major and minor effects on a patient's health, specific drug therapy and nursing implications. Prerequisites: Permission of Instructor.

**NCE214CD Emergency Cardiac Drugs .5 credit .5 period**

Explore the most current content regarding drugs used for patients that are critically ill, and those that are used during resuscitation. Specific drugs will be outlined according to the American Heart Association. Calculation of intravenous flow rates and appropriate dosages for each drug will be included. Prerequisites: Registered Nurse, Licensed Practical Nurse, or permission of instructor.

**NCE214MF Advanced IV Drug Therapy .5 credit .5 period**

Advanced course in drug calculation and administration using the ratio/proportion analysis method. Focus on intravenous medications and titrations for critical care, pediatric and high risk obstetric medications. Prerequisites: Current student in Associate Degree Nursing program, or permission of instructor.

**NCE214MI Math & Medications for Intermediate Nursing Students .5 credit .5 period**

Focus on basic mathematical concepts to calculate metric-apothecary conversion, dosage problems, intravenous flow rates using the ratio/proportion analysis method. These calculations will focus application to acute care, long-term care, and pediatric specialty areas. Prerequisites: A grade of C or better in NUR161, NUR163, NUR167, NUR169, HCR240AA, and FON241.)

**NCE214MO Math/Methods For Beginning Nursing Students .5 credit .5 period**

Focus on basic mathematical concepts to calculate metric-apothecary conversion, dosage problems and intravenous flow rates. Includes calculation problems with oral, parenteral, and reconstitution medications. Emphasis on the ratio/proportion problem solving method. Prerequisite: Current student in Associate Degree Nursing program, or permission of Instructor.

**NCE214OP Orientation to Nursing Program 1 credit 1 period**

Introduction of philosophy, purposes, objectives, and conceptual framework of Maricopa Community College District Nursing Program (MCCDNP). Includes orientation to the guidelines and procedures of Maricopa County Community College District Nursing Program. Emphasis on nursing process. Review and evaluation of practical nursing skills. Designed for transfer students, returning students, and Practical Nurses entering District Nursing Program. Prerequisites: Advanced placement into the Nursing program.

**NCE214PO Tutored NCLEX Review For Nursing Students 2 credits 2 periods**

Brief review of nursing care by systems using an NCLEX review book. Focus on nursing process, prioritizing, and critical thinking related to application of nursing care in case study situations. Also practice multiple-choice questions. Prerequisites: Currently enrolled nursing student, or permission of instructor.

**NCE242 Twelve Lead Electrocardiogram (EKG) Interpretation .5 credit .5 period**

Normal and abnormal wave forms of the cardiac cycle. Normal and abnormal heart axis. Differences between ventricular and supraventricular tachycardia. Various types of blocks. Identification of heart chamber enlargement. Injury, ischemic and necrotic heart patterns. Effect of specific drugs and electrolyte disorders on electrocardiograms (EKG). Prerequisites: Basic electrocardiogram (EKG) experience or previous course work in dysrhythmia interpretation or permission of instructor.

**NCE249AA Critical Care: Cardiac 1 credit 1 period**

Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the cardiac system. Prerequisites: Current license as Registered Nurse or Practical Nurse, or recent graduate of an accredited nursing program, or permission of the instructor.

**NCE249AB Critical Care: Respiratory 1 credit 1 period**

Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the respiratory system. Prerequisites: Current license as Registered Nurse or Practical Nurse, or recent graduate of an accredited nursing program, or permission of the instructor.

**NCE249AC Critical Care: Neurologic** 1 credit 1 period  
Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the neurologic system. Prerequisites: Current license as Registered Nurse or Practical Nurse, or recent graduate of an accredited nursing program, or permission of the instructor.

**NCE249AD Critical Care: Endocrine & Renal** .5 credit .5 period  
Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the endocrine and renal systems. Prerequisites: Current license as Registered Nurse or Practical Nurse, or recent graduate of an accredited nursing program, or permission of the instructor.

**NCE249AE Critical Care: Gastrointestinal** .5 credit .5 period  
Foundation in basic critical care for nurses who are new or interested in entering the critical care environment. Including anatomy, physiology, and pharmacology. Disease management for the gastrointestinal system. Prerequisites: Current license as Registered Nurse or Practical Nurse, or recent graduate of an accredited nursing program, or permission of the instructor.

**NCE259 Advanced Critical Care Nursing** 4 credits 4 periods  
Provides the experienced Critical Care Nurse with an opportunity to build on basic critical care knowledge. Advanced concepts in assessment, hemodynamic monitoring, pathophysiology of disease processes, and use of the Nursing Process for critically ill patients with complex, multisystem disorders. Designed to help prepare experienced Critical Care Nurses for the certification examination for Critical Care Nursing offered by the American Association of Critical Care Nurses. Prerequisites: NCE249, or Registered Nurse working in Critical Care, or permission of instructor.

**NCE260 Intra-Aortic Balloon Pump** .5 credit .5 period  
Mechanics of the cardiac cycle. Physiologic effects of the intra-aortic balloon pump. Indications and contraindications. Components, operation, care and maintenance of the intra-aortic balloon pump. Complications and nursing implications with the use of the intra-aortic balloon pump. Prerequisites: Registered Nurse (RN) or cardiovascular technician who has completed a Basic EKG course and has Critical Care Training.

**NCE276 Clinical Teaching in Nursing: An Overview** 1 credit 1 period  
Overview of the process, concepts and skills related to supervising nursing students in the clinical arena. Examines concepts of clinical teaching, provides comprehensive framework for planning, guiding, and evaluating learning activities for nursing students in the clinical arena. Prerequisites: Prerequisites: Current Registered Nurse License.

### Nursing Science: Basic (NUR)

**NUR104AB Structured Nursing Review** 1 credit 1 period  
Structured nursing tutorial assistance and nursing study skills to help students achieve success in their respective block of nursing courses. Nursing process and critical thinking application skills emphasized. Prerequisites: None. Corequisites: Concurrent enrollment in the Nursing program or permission of Department Chair.

**Course Note:** Course offered as Credit (P) No credit (Z) basis. May be repeated for a total of six (6) credit hours.

**NUR156 Nurse Assisting** 2 credits 2 periods  
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 Note:** NUR156 and NUR157 must be successfully completed concurrently to meet program requirements.

**NUR157 Nurse Assisting Lab** 2 credits 6 periods  
Demonstration of problem solving, professional behavior and therapeutic communication skills. Demonstration of caring behaviors 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 Note:** NUR156 and NUR157 must be successfully completed concurrently to meet program requirements.

**NUR161 Nursing Process/Critical Thinking I** 3 credits 3 periods  
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 Note:** 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**

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.

**NUR167 Pharmacology & Medication  
Administration I 1 credit 3 periods**

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**

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 Note:** Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

**NUR181 Nursing Process/  
Critical Thinking II 3 credits 3 periods**

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. Prerequisites: NUR161, NUR163, NUR169, and (HCR240 or HCR240AA). Corequisites: NUR189 or permission of Nursing Department chairperson.

**Course Note:** Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

**NUR185 Developing the  
Nurse's Role I 1 credit 1 period**

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**

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.

**NUR189 Nursing Science II 4 credits 12 periods**

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 Note:** 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**

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 and (HCR240 or HCR240AB), or Integrated Competency Assessment Network (ICAN) placement.

**Course Note:** 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**

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 Integrated Competency Assessment Network (ICAN) placement.

**NUR267 Pharmacology & Medication Administration III 1 credit 2 periods**

Provides the knowledge and skills to safely prepare and administer 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.

**NUR269 Nursing Science III 5 credits 15 periods**

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 to health education/promotion for clients, families, and small groups. Prerequisites: NUR181, NUR185, NUR187, NUR189, (HCR240 or HCR240AB or NCE214OP), or Integrated Competency Assessment Network (ICAN) placement.

**Course Note:** 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**

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.

**Course Note:** 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**

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**

Culminating clinical practice course to provide learning experiences applying theoretical and clinical concepts of complex needs for pediatric, childbearing, and high risk adults with multi- system alterations in health. Leadership, management, and caregiver roles of the professional nurse with clients and their families in selected areas of nursing practice 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 settings. Prerequisites: (NUR261, NUR263, NUR267, and NUR269), or NCE214OP, or Integrated Competency Assessment Network (ICAN) placement.

**Course Notes:** Nursing Process/Critical Thinking course and Nursing Science course must be successfully completed concurrently to meet program requirements.

## Office Automation Systems

**For Information: Richard Shortridge**  
**Phone: 623.845.3278**

[www.gc.maricopa.edu/business/oas](http://www.gc.maricopa.edu/business/oas)

**Who will hire me?**

The office occupations outlook is very good in Arizona. Skilled office employees are needed by large and small companies, service industries, government agencies, and private businesses of all kinds.

**What skills will I need on the Job?**

- Computer application skills.
- General office organizational skills.
- Written, verbal, and nonverbal communication skills
- Human relations and teamwork skills.

**What will I do on the Job?**

Today's office employee performs a variety of tasks. Data entry operators enter alphabetic and numeric data into a computer, proofread and make corrections to previously entered data, and keep records of completed work.

Receptionist greet visitors, answer phones and transfer calls, arrange appointments, collect and distribute mail and messages, give travel information, file documents, and type correspondence.

Office secretaries compose and type letters, schedule meetings and take notes, distribute mail, arrange for food service, file documents, keep inventory of office supplies, take dictation and transcribe information.

Office coordinators direct the office activities, prepare plans for the overall office maintenance, coordinate the office functions and projects, be a team leader. Administrative office coordinators provide assistance for top management, facilitate meetings and conferences, prepare and/or coordinate the preparation of documentation for the company, act as a liaison for the company.

**Administrative Office Coordinator  
Associate in Applied Science (AAS)  
64 credits**

**Program Description:** This program prepares the student for employment as an administrative office coordinator in a business office. The graduate will have achieved a broad base of both specialized skills and general knowledge which will contribute to growth in an office environment. Courses include microcomputer application skills; general office organizational skills; management skills; written, verbal, and non-verbal communication skills; public and human relation skills; and techniques for professional success. In addition, the student will gain a background in general studies.

**Note:** Required courses may not be available every semester so students should consult with a department advisor in order to complete degree requirements in an expedient manner. Due to limited course offerings, degree seeking students may find it necessary to extend completion time lines and attend both day and evening classes.

<b>Program Prerequisites:</b> (3 credits)	<b>Credits</b>
OAS101 Computer Typing I: Keyboarding & Formatting (3) <u>or</u> (Note: one year of high school typing) <u>or</u> (Note: equivalent typing skills)	3

<b>Required Courses:</b> (30 credits)	<b>Credits</b>
Students must earn a grade of "C" or better for each course listed in the Required Courses category.	
BPC114AE Excel: Level I	1
+ BPC114BE Excel: Level II	1
BPC117AM Database Management: Microsoft Access - Level I	1
BPC128 Introduction to Desktop Publishing	1
+ BPC/OAS135DK Word: Level I	2
+ BPC/OAS235DK Word: Level II	2
CIS133DA The Internet/World Wide Web	3
GBS131 Business Calculations (3) <u>or</u>	
+ GBS161 Mathematics of Business (3)	3
MGT101 Techniques of Supervision	3
+ OAS103AA Computer Typing: Skill Building I	1
+ OAS103AB Computer Typing: Skill Building II	1
OAS108 Business English	3
OAS113 Micro-Alphabetic Indexing	1
OAS120 Financial Record Keeping	3
+ OAS121 Techniques of Proofreading	1
OCS122 Office Orientation and Essential Skills (3) <u>or</u>	
OCS100 Basic Office Skills (1) <u>and</u>	
OCS102 Office Career Preparation (1) <u>and</u>	
OCS104 Office Communications (1)	3

<b>Restricted Electives:</b> (9 credits)	<b>Credits</b>
ACC107 Bookkeeping Theory and Practice (4) <u>or</u>	
ACC111 Accounting Principles I (3)	3-4
+ ACC115 Computerized Accounting (2) <u>or</u>	
+ ACC115AA Computerized Accounting: Quicken--Level I (1) <u>and</u>	
+ ACC115BA Computerized Accounting: Quicken--Level II (1) <u>2</u>	
BPC106AH MS Outlook: Level I	0.5
+ BPC106BH Microsoft Outlook: Level II	0.5
BPC110 Computer Usage and Applications	3
BPC121AB MS-DOS Operating System	1
+ BPC138AA Windows Desktop Design & Publishing (3) <u>or</u>	
+ BPC138AB Macintosh Desktop Design & Publishing (3)	3
+ BTO/OCS156 Admin Office Coordinator Internship (1-3)	1-3
CIS105 Survey of Computer Information Systems (3) <u>and</u>	
+ CIS190 Introduction to Local Area Networks (3)	6
CIS122AB OS/400 Operating System	1
+ GBS233 Business Communication	3
MGT251 Human Relations in Business	3
+ OAS103AC Typing: Skill Building III	1
+ OAS106AA Basic Machine Transcription: Beginning	1
OAS118 10-Key By Touch	1

**General Studies Requirements:** (25 credits)

<b>Core:</b> (15 credits)	<b>Credits</b>
<b>First-Year Composition:</b>	6
+ ENG101 First-Year Composition (3) <u>and</u>	
+ ENG102 First-Year Composition (3) <u>or</u>	
ENG111 Technical Writing (3) (Note: recommended)	
<b>Oral Communication:</b>	3
COM110 Interpersonal Communication (3) <u>or</u>	
+ COM230 Small Group Communication (3)	
<b>Critical Reading:</b>	3
+ CRE101 Critical and Evaluative Reading I (3)	
<b>Mathematics:</b>	3
+ MAT102 Mathematical Concepts/Applications (3) <u>or</u>	
+ MAT122 Intermediate Algebra (3) <u>or</u> Equivalent as indicated by assessment <u>or</u> A higher level math course	

<b>Distribution:</b> (10 credits)	<b>Credits</b>
<b>Humanities and Fine Arts:</b>	3
Any approved course, see page 77.	
<b>Natural Sciences:</b>	4
Any approved course, see page 78.	
<b>Social and Behavioral Sciences:</b>	3
Any approved course, see page 77.	

Programs and Courses

### Data Entry Clerk Certificate 11 credits

**Program Description:** This program prepares the student for employment as a beginning data entry clerk in a business office environment. Microcomputer skill development includes keyboarding, 10-key, and data entry. Techniques for effective office communication and professional success are a part of the program.

#### Required Courses: (11 credits) **Credits**

Students must earn a grade of "C" or better for each course listed in the Required Courses category.

BPC/OAS111AA	Computer Keyboarding I (1) <u>or</u>	
OAS101AA	Computer Typing I: Keyboard Mastery (1)	1
+ OAS101AB	Computer Typing I: Letters, Tables & Reports	1
+ OAS103AA	Computer Typing: Skill Building I	1
+ OAS103AB	Computer Typing: Skill Building II	1
OAS108	Business English	3
OAS118	10-Key By Touch	1
OCS122	Office Orientation and Essential Skills (3) <u>or</u>	
OCS100	Basic Office Skills (1) <u>and</u>	
OCS102	Office Career Preparation (1)	
OCS104	Office Communications (1)	3

### Receptionist Certificate 9 credits

**Program Description:** This program prepares the student for employment as a receptionist in a business office environment. Skill development includes microcomputer keyboarding and filing; word processing; electronic and traditional mailing methods; and telephone system skills. Techniques for effective office communication and making appropriate office ethical choices are also part of the program.

#### Program Prerequisites:

Certificate of Completion in Data Entry Clerk **11**

**Note:** In lieu of the Data Entry Certificate, students may meet this program prerequisite by demonstrating knowledge and skills equivalent to the following courses through assessment:

BPC/OAS111AA	Computer Keyboarding I (1) <u>or</u>	
OAS101AA	Computer Typing I: Keyboard Mastery (1) <u>or</u>	1
+ OAS101AB	Computer Typing I: Letters, Tables & Reports	1
+ OAS103AA	Computer Typing: Skill Building I (1)	1
+ OAS103AB	Computer Typing: Skill Building II	1
OAS118	10-Key By Touch	1

#### and also completing the following courses:

OAS108	Business English	3
OCS122	Office Orientation and Essential Skills (3) <u>or</u>	
OCS100	Basic Office Skills (1) <u>and</u>	
OCS102	Office Career Preparation (1) <u>and</u>	
OCS104	Office Communications (1)	3

#### Required Courses: (9 credits)

#### **Credits**

Students must earn a grade of "C" or better for each course listed in the Required Courses category.

BPC106AH	MS Outlook: Level I	0.5
+ BPC106BH	Microsoft Outlook: Level II	0.5
BPC/OAS113	Micro-Alphabetic Indexing	1
BPC/CIS114AE	Excel: Level I	1
+ BPC/OAS135DK	Word: Level I	2
GBS131	Business Calculations	3
+ OAS101AC	Computer Typing I: Production & Manuscript	1

### General Office Secretary Certificate 16 credits

**Program Description:** This program prepares the student for employment as a general office secretary in a business office environment. Skill development includes keyboarding and microcomputer application skills, filing, machine transcription, electronic and traditional mailing methods, and financial record keeping. Techniques for effective office communication using PowerPoint and other computer applications are part of the program.

#### Program Prerequisites:

Certificate of Completion in Receptionist **9**

#### Required Courses: (16 credits)

#### **Credits**

Students must earn a grade of "C" or better for each course listed in the Required Courses category.

+ BPC/CIS114BE	Excel: Level II	1
BPC/CIS117AM	Database Management: Microsoft Access - Level I	1
BPC128	Introduction to Desktop Publishing	1
+ BPC/OAS235DK	Word: Level II	2
CIS118AB	Powerpoint: Level I	1
CIS121AG	Windows 98 - Level I	1
CIS133DA	The Internet/World Wide Web	3
+ OAS103AC	Computer Typing: Skill Building III	1
+ OAS106AA	Basic Machine Transcription: Beginning	1
OAS120	Financial Record Keeping	3
+ OAS121	Techniques of Proofreading	1

**Office Coordinator Certificate  
12 - 13 credits**

**Program Description:** This program prepares the student for employment as a business office coordinator. Skill development includes accounting theory, computerized accounting, supervision of employees and database applications, desktop publishing.

**Program Prerequisites:**

Certificate of Completion in General Office Secretary **16**

**Required Courses:** (12-13 credits) **Credits**

Students must earn a grade of "C" or better for each course listed in the Required Courses category.

ACC107	Bookkeeping Theory and Practice (4) <u>or</u>	
ACC111	Accounting Principles I (3)	<b>3-4</b>
+ ACC115	Computerized Accounting	<b>2</b>
+ CIS117BM	Database Management	
	Microsoft Access - Level II	<b>1</b>
MGT101	Techniques of Supervision	<b>3</b>
MGT251	Human Relations in Business	<b>3</b>

**Course Descriptions**

**Office Automation Systems  
(BTO, OAS, OCS)**

**Business Technology for the Office (BTO)**

**BTO104** **Etiquette in the Office** .5 credit .5 period  
Overview of professional etiquette in the workplace, including specific etiquette skills and practice in their application. Prerequisites: None. (F,S,D,E)

**BTO106** **Building a Professional Office Image** .5 credit .5 period  
Developing and projecting a professional office image in attire, grooming, hygiene, and attitude. Prerequisites: None. (F,S,D,E)

**BTO108** **Managing the Office Work Flow** .5 credit .5 period  
Skills and strategies for efficient work flow management in the office. Prerequisites: None. (F,S,D,E)

**BTO112** **Rapid Writing and Notetaking** 2 credits 2 periods  
Development and application of rapid writing skills for notetaking, messages, and minutes. Prerequisites: None. (F,S,D,E)

**BTO114** **Office Calculations** 1 credit 1 period  
Applying basic calculations to office tasks. Prerequisites: None. (F,S,D,E)

**BTO121** **Win-Win Office Techniques** .5 credit .5 period  
Techniques for assertive skills which are appropriate and beneficial in the office. Prerequisites: None. (F,S,E)

**BTO122** **Etiquette, Image, Work Flow, and Win-Win Techniques** 2 credits 2 periods  
Review and practice of professional etiquette in the workplace; developing and projecting a professional office image; efficient workflow management; and techniques for appropriate and beneficial office assertiveness skills. Prerequisites: None.

**BTO124** **Office Communication That Works** 1 credit 1 period  
Using verbal and nonverbal communication techniques in the office. Appropriate and inappropriate language and topics in the office setting. Prerequisites: None. (F,S,E)

**BTO130** **Coping with Office Equipment** 1 credit 1 period  
Troubleshooting office equipment malfunctions and inadequacies and locating appropriate resources for proper operation and repair. Work space and environment safeguards. Minor maintenance and/or adjustments of machines. Prerequisites: None. (F,S,D,E)

**BTO132** **Technology for Office Communications** 2 credits 2 periods  
Various types of contemporary office communication technology. Includes uses and features of each type as well as demonstrations of their operation. Prerequisites: None. (F,S,D,E)

**BTO142** **Finding/Keeping Right Office Employees** 1 credit 1 period  
Description of writing job descriptions and advertisements for office employment. Interviewing prospective employees. Evaluating work performance. Options for resolution of poor employee performance. Prerequisites: None. (F,S,D,E)

**BTO144** **Compensation/Benefits for Office Employees** .5 credit .5 period  
Description of various required and voluntary benefits provided for office employees. Prerequisites: None. (F,S,D,E)

**BTO146** **You and Uncle Sam—Employment Regulations for the Office** .5 credit .5 period  
Description of federal regulation of discrimination, safety, and labor standards in the business office. Prerequisites: None. (F,S,D,E)

**BTO148** **Office Ethics and Culture** 2 credits 2 periods  
Ethical issues and standards in the office; making ethical choices. Relationships and attitudes in the office. Office politics. Prerequisites: None. (F,S,D,E)

**Office Automation Systems (OAS)**

**OAS101 Computer Typing I: Keyboarding and Formatting** 3 credits 5 periods

Keyboard mastery; letters, tables, and reports; office production; and manuscripts. Prerequisites: None. (F,S,D,E,Su1)

**OAS101AA Computer Typing I: Keyboard Mastery** 1 credit 1.7 periods

Incorporates correct touch typing principles. Prerequisites: None. (F,S,D,E, Su1)

**OAS101AB Computer Typing I: Letters, Tables & Reports** 1 credit 1.7 periods

Letter, table, and report formatting. Prerequisites: OAS101AA or permission of department/division. (F,S,D,E,Su1)

**OAS101AC Computer Typing I: Production & Manuscript** 1 credit 1.7 periods

Simple office projects and manuscripts. Prerequisites: OAS101AB or permission of department/division. (F,S,D,E,Su1)

**OAS102 Computer Typing II: Document Production** 3 credits 5 periods

Arrangement of letters, memos, manuscripts, and tabulation; speed/accuracy improvement. Prerequisites: OAS101 or permission of department/division. (F,S,D,E,Su1)

**OAS102AA Computer Typing II: Letters and Memos** 1 credit 1.7 periods

Further develop and refine letter and memo skills; improve speed and accuracy. Prerequisites: OAS101 or permission of department/division. (F,S,D,E,Su1)

**OAS102AB Computer Typing II: Manuscripts** 1 credit 1.7 periods

Further develop and refine manuscript skills. Prerequisites: OAS101 and OAS102AA or permission of department/division. (F,S,D,E,Su1)

**OAS102AC Computer Typing II: Tabulation** 1 credit 1.7 periods

Further develop and refine tabulation skills; improve speed and accuracy. Prerequisites: OAS101 and OAS102AB, or permission of department/division. (F,S,D,E,Su1)

**OAS103 Computer Typing: Skill Building** 3 credits 5 periods

Individual progression on speed/accuracy drills. Prerequisites: Ability to touch type 25 words per minute or permission of department/division. (F,S,D,E,Su1,2)

**OAS103AA Computer Typing: Skill Building I** 1 credit 1.7 periods

Individual progression on speed/accuracy drills. Prerequisites: Ability to touch type 25 words per minute or permission of department/division. (F,S,D,E,Su1)

**OAS103AB Computer Typing: Skill Building II** 1 credit 1.7 periods

Progression on speed/accuracy drills. Prerequisites: OAS103AA or permission of department/division. (F,S,D,E,Su1)

**OAS103AC Computer Typing: Skill Building III** 1 credit 1.7 periods

Progression on speed/accuracy drills. Prerequisites: OAS103AB or permission of department/division. (F,S,D,E,Su1,2)

**OAS106AA Basic Machine Transcription: Beginning** 1 credit 1.7 periods

Beginning transcribing techniques with emphasis on punctuation. Prerequisites: OAS100 or OAS101 or permission of department/division. (O)

**OAS108 Business English** 3 credits 3 periods

Comprehensive coverage of correct use of English grammar including spelling, punctuation, capitalization, and number style mechanics in a business context. Prerequisites: None. (F,S,D,E)

**OAS111AA Computer Keyboarding I** 1 credit 1.7 periods

Mastery of essential microcomputer keyboarding skills. Emphasis on touch typing of alphabetic and numeric keys and symbols. Prerequisites: None. (F,S,D,E,Su1)

**OAS111AB Computer Keyboarding II** 1 credit 1.7 periods

Further development of microcomputer keyboard speed and accuracy. Emphasis on touch typing with speed and accuracy development of numerals as related to preparation and handling of documents. Prerequisites: BPC/OAS111AA or permission of instructor. (F,S,D,E, Su1)

**OAS113 Micro-Alphabetic Indexing** 1 credit 1.7 periods

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. (F,S,D,E,Su1)

**OAS118 10-Key By Touch** 1 credit 1.7 periods

Touch system of numeric keys on ten-key pads. Prerequisites: None. (F,S,D,E,Su1,2)

**OAS 119 Basic Data Entry Activities** 1 credit 2 periods

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. (F,S,D,E)

**OAS120 Financial Record Keeping** 3 credits 3 periods

Computerized application of concepts and procedures of office record keeping; includes finance and personnel records, inventory systems, banking procedures and cash control; decision-making process for solving financial problems. Prerequisites: None. (O)

**OAS121 Techniques of Proofreading 1 credit 1 period**  
 Recognition of errors in mechanics, format, and content in any written communication. Prerequisites: ENG101 or OAS108 or permission of instructor. (F,S,D,E,Su1,2)

**OAS135DD WordPerfect: Level I 2 credits 2 periods**  
 Using WordPerfect software 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 words per minute or permission of instructor. (F,S,D,E,Su1,2)

**OAS135DK Word: Level I 2 credits 2 periods**  
 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 words per minute or permission of instructor. (F,S,D,E,Su1,2)

**OAS201 Computer Typing III: Advanced Document Production 3 credits 5 periods**  
 Mastery of skills and techniques used in the production of letter, manuscript, and statistical documents; decision making; business/industry standard emphasized. Prerequisites: OAS102 or minimum typing speed of 50 wpm or permission of department/division. (F,S,D,E)

**OAS235DD WordPerfect: Level II 2 credits 2 periods**  
 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. (F,S,D,E,Su1,2).

**OAS235DK Word: Level II 2 credits 2 periods**  
 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. (F,S,D,E,Su1,2)

**OAS236 Office Suites 3 credits 5 periods**  
 Basic use of an office suites software package; develops skills in using software features such as word processing, spreadsheet, database, presentations, the integration of these features, electronic mail, and scheduling capabilities. Basic computer literacy assumed. Prerequisites: None.

**OAS285 Office Automation Support Internship 1-3 credits 1-3 periods**  
 Office automation support experience in a business or industry. 80 hours of designated work per credit. Maximum of 3 credits allowed. Prerequisites: Department approval. (F,S,D,E)

**OAS 298 Special Projects 1-3 credits**  
 See page 278. (O)

**Office Career Success (OCS)**

**OCS100 Basic Office Skills 1 credit 2 periods**  
 Develop techniques and workplace skills to achieve professional office etiquette. Broad, basic knowledge and skills necessary for the workplace. Includes knowledge of basic business equipment, office documents and procedures, and telephone etiquette. Develop rapid writing techniques for note taking of messages and minutes. Use appropriate software and computers for office communications. Develop skills to enable efficient workflow management in a business setting. Investigate functionality and protocol of electronic mail systems. Prerequisites: None.

**OCS102 Office Career Preparation 1 credit 2 periods**  
 Identify and investigate career goals and opportunities in the workplace. Generate an individual education plan and a career portfolio to include preparing a resume, cover letter and practicing interview techniques. Review current business attire and associated images in the workplace. Prerequisites: None.

**OCS104 Office Communications 1 credit 2 periods**  
 Plan and develop effective oral communications and written documents using PowerPoint. Identify appropriate and inappropriate language and topics in the business setting. Investigate verbal and non-verbal communication techniques in the office. Investigate basic contents of memorandums, letters and reports. Investigate various communication devices including fax, network systems and machines. Prerequisites: None.

**OCS122 Office Orientation and Essential Skills 3 credits 6 periods**  
 Develops a comprehensive understanding of essential workplace skills and reinforces learning with structured hands-on practices. Includes fundamental knowledge of office etiquette, note taking, protocol of electronic mail systems, and preparation of oral and written presentations. Identifies individual career opportunities to include preparing a resume and practicing interview techniques. Prerequisites: None

**Note:** This course is designed for individuals interested in advanced clerical studies.

**OCS156AA Admin Office Coordinator Internship j1 credit**  
**OCS156AB Admin Office Coordinator Internship 2 credits**  
**OCS156AC Admin Office Coordinator Internship 3 credits**  
 Administrative coordinator work experience in a business office. 80 hours of designated work per credit. Maximum of 3 credits allowed. Prerequisites: Departmental approval.

## Philosophy

For Information: Robert Hubbard  
Phone: 623.845.3746

**Student Goals:** Personal, General Education, Career-related

Philosophy courses critically examine the nature of human beings and of the world, ways in which people seek to understand their world, and ethical and moral issues which arise. Students take these courses:

- For **Personal Interest**. PHI101 (Introduction to Philosophy) and PHI105 (Ethics) examine fundamental philosophic issues and major attempts to resolve them. PHI103 (Logic) helps the student develop effective reasoning skills.
- To meet the general studies **Humanities Requirement**. All PHI courses described below meet this requirement. PHI101 is recommended. All PHI courses transfer.
- To **Prepare for a Major** in philosophy at a four-year institution. PHI101 and 103 will generally transfer as major credit toward the baccalaureate degree in philosophy. PHI105 may also meet major requirements. Students should consult with a member of the Philosophy Department to plan for transfer to a four-year institution.
- As **Background for other Careers**. Philosophy is strongly recommended as an undergraduate major or minor for those planning to enter law, journalism, government, public relations, and other areas requiring training and skill in critical thinking.

### ■ ■ ■ Course Descriptions ■ ■ ■

#### Philosophy (PHI)

**PHI101 Introduction to Philosophy** 3 credits 3 periods  
General consideration of human nature and the nature of the universe. Knowledge, perception, freedom and determinism, and the existence of God. Prerequisites: None. (F,S,D,E,Su1,2)

**PHI103 Introduction to Logic** 3 credits 3 periods  
Informal logic, logical fallacies, elementary symbolic logic, analysis of argument forms, and construction of proofs for validity. Prerequisites: ENG101 or ENG107 or equivalent. (F,S,D,E,Su1)

**PHI104 World Philosophy** 3 credits 3 periods  
Examination of questions such as the meaning of life and death, social justice, appearance and reality, human nature, the identity of the self freedom and destiny, the ethical life, and the relationship of science and religion. Comparative analysis of diverse Eastern and Western viewpoints. Prerequisites: None. (F,S,D)

**PHI105 Introduction to Ethics** 3 credits 3 periods  
Major theories of conduct. Emphasis on normative ethics, theories of good and evil from Plato to the present. Prerequisites: None. (O)

**PHI213 Medical and Bio-Ethics** 3 credits 3 periods  
A philosophical consideration of moral problems that arise in relation to medicine and biology, e.g., death, patient rights and biological experimentation. Prerequisites: None. (F,S,D)

**PHI214 Business Ethics** 3 credits 3 periods  
Philosophical consideration of moral problems arising in business practice, including corporate responsibility, government regulation, hiring practices, and advertising. Application to both the United States and other countries. Prerequisites: ENG101, or ENG107, or equivalent. (O)

**PHI243 World Religions** 3 credits 3 periods  
The development of various religions from prehistoric to modern times. Political, economic, social, and geographic relationships among world religions. Consideration of both Eastern and Western religions. Prerequisites: None. (F,S,D,E,Su1,2)

**PHI244 Philosophy of Religion** 3 credits 3 periods  
Religious language, the existence of God, miracles, and human destiny. Prerequisites: None. (O)

## Physical Science

For Information: Stan Celestian  
Phone: 623.845.3681

**Student Goals:** General Education

Physical Science courses will meet the Natural Sciences part of the General Studies requirements for the AA, AAS, and AGS degrees.

### ■ ■ ■ Course Descriptions ■ ■ ■

#### Physical Science (PHS)

**PHS110 Fundamentals of Physical Science** 4 credits 6 periods  
Survey of the principles of physics and chemistry. Prerequisites: Grade of "C" or better in MAT091, or MAT092, or satisfactory score on Math placement exam. (F,S,D,E,Su1)

**PHS120 Introduction to Physical Science: Astronomy, Meteorology, Geology, and Oceanography** 4 credits 6 periods

Designed primarily for students with limited background in physical science and mathematics and for non-science majors. Topics from astronomy, meteorology, geology and oceanography. A laboratory course designed to help the students learn the basic laws and facts of the physical sciences which provide the starting points for scientific thought and speculations. May not receive credit for both PHS120 and GLG106. Prerequisites: None. (F,S,Su1,D,E)

**PHS298 Special Projects** 1-3 credits  
See page 278. (O)

## Physics

**For Information: Cheryl Dellai**  
**Phone: 623.845.3678**

**Student Goals:** General Education, Transfer, Career-related

The science of physics seeks to understand the behavior of matter and energy at the most general and fundamental level. Other sciences, e.g., chemistry and biology, build on the laws of physics and rely on many instruments originally devised by physicists.

Employment of physicists is greatest in areas that have heavy industrial concentrations and large college and university enrollments. Related careers are medical electronics, solid-state physics, production supervision, industrial sales, patent law, thermodynamics, acoustics, optics, and nuclear physics.

**Transfer Recommendations:** This program is designed as the first two years of course work for students intending to pursue the baccalaureate degree at a four-year institution.

**Note:** Students planning a major in physics should consult with a department advisor to outline and plan their academic schedule in order to transfer to a senior institution and to complete degree requirements in an expedient manner. Required courses may not be available every semester or year. Due to limited course offerings, degree seeking students may find it necessary to extend completion time lines and attend both day and evening classes.

<b>Departmental Recommendations:</b>	<b>Credits</b>
+ PHY115 University Physics I	5
+ PHY116 University Physics II	5
+ MAT220 Analytic Geometry and Calculus I	5
+ MAT230 Analytic Geometry and Calculus II	5
+ MAT241 Calculus with Analytic Geometry III	4
+ MAT262 Differential Equations	3

<b>Other Recommendations:</b>	<b>Credits</b>
+ CHM151 General Chemistry I (3) <b>and</b>	
+ CHM151LL General Chemistry I Laboratory (1)	4
+ CHM152 General Chemistry II (3) <b>and</b>	
+ CHM152LL General Chemistry II Laboratory (1)	4

## ■ ■ ■ Course Descriptions ■ ■ ■

### Physics (PHY)

**PHY090 Preparation for Introduction to Physics** 1 credit 1 period

A developmental course designed to review basic math and physics principles for students deficient or insecure in these areas. Stresses individualized instruction and "hands-on" experience. Serves to prepare the student for PHY101 or PHS110. Prerequisites: None. (F,S,D,Su1)

**PHY101 Introduction to Physics** 4 credits 6 periods

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. (F,S,D,E, Su1,Su2)

**PHY111 General Physics I** 4 credits 6 periods

Includes motion, energy, and properties of matter. Prerequisites: Trigonometry or department consent. (F,S,D,E,Su1)

**Course Note:** Recommended for preprofessional and suggested for certain other majors.

**PHY112 General Physics II** 4 credits 6 periods

Includes electricity, electromagnetism, and modern physics. Prerequisites: PHY105 or PHY111. (F,S,Su2,D,E)

**PHY115 University Physics I** 5 credits 7 periods

General physics course using calculus to develop the principles of mechanics and thermodynamics. Recommended for majors in the sciences and mathematics. Required for Engineering majors. Prerequisites: MAT220 or MAT221, or department consent. Corequisites: MAT230 or MAT231. One year high school physics or PHY111 and PHY112 is strongly recommended. (F,D,E,S,D)

**PHY116 University Physics II** 5 credits 7 periods

Principles of electricity, magnetism, waves, and optics. Required for Engineering majors. Prerequisites: PHY115 and (MAT230 or MAT231). Corequisites: MAT241. (F,D,S,D,E)

**PHY298 Special Projects** 1-3 credits

See page 278. (O)

## Political Science

**For Information: William Lamkin**  
**Phone: 623.845.3218**

Political Science courses serve students who intend to major in Political Science at a four-year institution, students who need these courses in preparation for other careers, and students choosing them for personal interest. Students intending to pursue a baccalaureate degree in political science should consult with a departmental advisor to plan their program.

**Availability:** Primarily day

**Transferability:** All courses transfer to state universities. However, transferability varies based on university and four-year degree program.

### ■ ■ ■ Course Descriptions ■ ■ ■

#### Political Science (POS)

**POS100 Introduction to Political Science** 3 credits 3 periods  
 Introduction to the discipline of political science and its relation to other disciplines with emphasis on the major philosophies and institutions of government. Prerequisites: None. (F,D)

**POS110 American National Government** 3 credits 3 periods  
 Study of the historical backgrounds, governing principles, and institutions of the national government of the United States. Prerequisites: None. (F,S,D,E)

**POS115 Issues in American Politics** 3 credits 3 periods  
 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. (O)

**POS120 World Politics** 3 credits 3 periods  
 Introduction to principles and issues relating to the study of international relations. Evaluation of the political, economic, national, and transnational rationale for international interactions. Prerequisites: None. (F,S,D,E)

**POS130 State and Local Government** 3 credits 3 periods  
 Survey of state and local government in the United States. Special attention on Arizona State government. Prerequisites: None. (S,D)

**POS140 Comparative Government** 3 credits 3 periods  
 Overview and evaluation of the subfield 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. (O)

**POS210 Political Ideologies** 3 credits 3 periods  
 Survey of twentieth century non-democratic ideologies and movements with emphasis on Marx, Lenin, Mussolini, Hitler, Stalin, and Mao. Prerequisites: None. (F,S,D)

**POS221 Arizona Constitution** 1 credit 1 period  
 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. (F,S,D,E)

**POS222 U.S. Constitution** 2 credits 2 periods  
 Examination of the United States Constitution. Equivalent to the first part of POS220. May not enroll in POS220 and POS222 concurrently. Prerequisites: None. (F,S,D,E)

**POS223 Civil Rights** 3 credits 3 periods  
 The historic background and current status of major civil rights issues in the United States. Prerequisites: None. (F,S,D)

## Pre-Forestry

### Associate in Arts (AA)/Transfer Program for Northern Arizona University

A forester manages and develops forest lands and their resources for economic and recreational purposes.

Recent surveys indicate that there will be a shortage of graduate foresters in several years. Nearly two out of five foresters work in private industry, mainly for pulp and paper, lumber, logging and milling companies. About one-fourth work for the federal government and the remainder for state and local government, colleges and universities, consulting firms, or are self-employed as a consultant or forest owner.

**Transfer Recommendations:** For information on Northern Arizona University's Forestry program and transfer guide, please visit: <http://www.for.nau.edu/index.shtml>

## Pre-Health

(See options below)

### Student Goals: Transfer

Pre-health programs are designed for students preparing for the following professional schools: medical, dental, pharmacy, physical therapy, and optometry. Students planning to apply to one of these schools should first pursue the baccalaureate degree at a four-year institution. In view of the keen competition for admission to professional schools, it is practical to have a major in a field that one could pursue as an alternative. Traditionally, students have chosen biology, chemistry, or biochemistry as their major. All majors are acceptable as long as pre-med prerequisites are met.

Requirements are fairly uniform across the country. However, students should become acquainted with the requirements of a particular professional school by consulting its catalog as soon as possible. Students are urged to consult with a departmental advisor in their chosen major to plan a program for transfer to a four-year institution.

Students who take all their science requirements at the community college should be sure to take some upper-division science courses at a four year institution. Although the community college experience is a time of exploration for a suitable major, by the junior year a major should be selected.

**Note:** The following programs recommend pre-health courses suitable for transfer students. The total credits recommended exceed the requirement for the AA degree. Students who intend to achieve an AA degree should pay particular attention to the recommendations for general education courses.

### Pre-Medical/Pre-Dental

A physician, whether allopathic, osteopathic, or podiatric diagnoses, prescribes medication for, and treats diseases and disorders of the human body. A physician may also perform surgery and operations and often specializes in one aspect of medical care and treatment.

Dentists are concerned with examination, diagnosis, prevention and treatment of ailments or abnormalities of gums and teeth. Most dentists are general practitioners with a few specializing in certain areas.

The employment outlook for physicians in the 1990's may not reflect the glory years for doctors as in the past. There is debate as to whether there is a physician surplus. The medical field is also changing—away from private practices to jobs run by big business types, although most are in private practice.

Employment opportunities for dentists are also not very encouraging. There is an over supply of dentists. As a result, many dental schools have cut their classes by one-half. Thus by the end of the 1990's the supply should even out. However, now is an excellent time to get into dental schools (1.2 applicants for every position).

**Program Description:** This is a suggested curriculum for the first two years of preparation for entering medical or dental school. Students are urged to consult with a faculty advisor in planning a program which will meet the entrance requirements of professional schools.

<b>Program Recommendations:</b>		<u>Credits</u>
BIO181	General Biology (Majors) I	4
+ BIO182	General Biology (Majors) II	4
+ CHM151	General Chemistry I (3) <b>and</b>	
+ CHM151LL	General Chemistry I Laboratory (1)	4
+ CHM152	General Chemistry II (3) <b>and</b>	
+ CHM152LL	General Chemistry II Laboratory (1) <b>or</b>	
+ CHM154	General Chemistry II with Qual (3) <b>and</b>	
+ CHM154LL	General Chemistry II with Qual Laboratory (1)	4-5
+ CHM235	General Organic Chemistry I (3) <b>and</b>	
+ CHM235LL	General Organic Chemistry I Laboratory (1)	4
+ CHM236	General Organic Chemistry II (3) <b>and</b>	
+ CHM236LL	General Organic Chemistry II Laboratory (1)	4
+ MAT151*	College Algebra / Functions	4

<b>And Either:</b>		<u>Credits</u>
+ MAT182	Plane Trigonometry	3
+ PHY111	General Physics I	4
+ PHY112	General Physics II	4

\* See guidelines for proper placement of students in math. Students applying for medical school need to take the MCAT (Medical College Admission Test). Calculus is required in a few medical schools. See specific medical school catalog. Unless a student wishes to major in a science, it is advised to take some sciences at the upper division level, not at the community college.

### General Studies Requirements:

See approved list for AA degree, page 61. In determining course choices, students should be guided by the requirements of the four-year institution from which they expect to graduate.

### Pre-Optometry

An optometrist examines and determines the condition of one's eyes and prescribes treatment to conserve or improve vision without the use of medicine, drugs, or surgery.

Employment opportunities are expected to be favorable through the 1990's. An increase in total population will cause an increased demand for optometric services. Optometrists may work in commercial settings or set up their own private practices. About 2 out of 5 practice in towns of under 25,000 inhabitants.

**Program Description:** This is a suggested curriculum for the first two years of preparation for entering optometry school. Students are urged to choose a specific professional school as soon as possible, and to consult with a faculty advisor in planning a program which will meet the entrance requirements of that school.

**Program Recommendations:**

	<u>Credits</u>
BIO181 General Biology (Majors) I	4
+ BIO182 General Biology (Majors) II	4
+ BIO205** Microbiology	4
+ CHM151 General Chemistry I (3) <b>and</b>	
+ CHM151LL General Chemistry I Laboratory (1)	4
+ CHM152 General Chemistry II (3) <b>and</b>	
+ CHM152LL General Chemistry II Laboratory (1) <b>or</b>	
+ CHM154 General Chemistry II with Qual (3) <b>and</b>	
+ CHM154LL General Chemistry II with Qual Laboratory (1)	4-5
+ CHM235 General Organic Chemistry I (3) <b>and</b>	
+ CHM235LL General Organic Chemistry I Laboratory (1)	4
+ CHM236 General Organic Chemistry II A (3) <b>and</b>	
+ CHM236LL General Organic Chemistry II A Laboratory (1)	4
+ MAT151 College Algebra / Functions	4
+ MAT182 Plane Trigonometry	3
+ MAT220* Analytic Geometry and Calculus I	5
+ PHY111 General Physics I	4
+ PHY112 General Physics II	4
+ PSY230 Introduction to Statistics	3

\* Most optometry schools require calculus. In this case MAT230 is also recommended.

\*\*Two-thirds of optometry schools require microbiology or bacteriology.

**General Studies Requirements:**

See approved list for AA degree. The following course is recommended within the General Education requirements in this program.

**Social and Behavioral Sciences:**

PSY101 Introduction to Psychology	3
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**Pre-Pharmacy**

Pharmacists are medication specialists, who advise patients on the proper use of medicines, monitor patients for therapeutic and adverse drug responses, and serve as consultants to other health professionals on drug therapy.

Pharmacy is a health-care profession which offers the practitioner excellent and diverse career opportunities in community or hospital practice, clinical pharmacy, industry, education, or government.

**Program Description:** This two to three-year preprofessional study prepares the student for admission to the Doctor of Pharmacy (Pharm.D.) program at the University of Arizona College of Pharmacy. The Pharm.D. portion of the program requires four additional years of study. A student who intends to attend another school of pharmacy should consult with a faculty advisor for assistance in planning a pre-pharmacy program which will meet the entrance requirements of that school. Admission to the Pharm.D. program is selective and competitive.

**Program Recommendations:**

	<u>Credits</u>
BIO181 General Biology (Majors) I	4
+ BIO182 General Biology (Majors) II	4
+ BIO205 Microbiology	4
+ CHM151 General Chemistry I (3) <b>and</b>	
+ CHM151LL General Chemistry I Laboratory (1)	4
+ CHM152 General Chemistry II (3) <b>and</b>	
+ CHM152LL General Chemistry II Laboratory (1)	4
+ CHM220 Analytical Chemistry (3) <b>and</b>	
+ CHM220LL Analytical Chemistry Laboratory (1)	5

+ CHM235 General Organic Chemistry I (3) <b>and</b>	
+ CHM235LL General Organic Chemistry I Laboratory (1)	4
+ CHM236 General Organic Chemistry II A (3) <b>and</b>	
+ CHM236LL General Organic Chemistry II A Laboratory (1)	4
ECN111 Macroeconomic Principles (3) <b>or</b>	
ECN112 Microeconomic Principles (3)	3
+ ENG101 First-Year Composition	3
+ ENG102 First-Year Composition	3
+ MAT212 Brief Calculus	3
+ PHY111 General Physics I	4
ENH/SPH Any ENH or SPH literature elective	3

**General Studies Requirements:**

See approved list for AA degree. The following courses are recommended within the General Education requirements in this program.

**Humanities\*:****Two courses from the following:**

ARH101 Prehistoric through Gothic Art	3
ARH102 Renaissance through Contemporary Art	3
ASB102 Introduction to Cultural and Social Anthropology	3
HIS100 History of Western Civilization to Middle Ages	3
HIS101 History of Western Civilization Middle Ages to 1789	3
HIS102 History of Western Civilization 1789 to Present	3
MHL141 Appreciation and Literature of Music to 1800	3
MHL142 Appreciation and Literature of Music 1800 to Present	3
PHI101 Introduction to Philosophy	3
REL101 Introduction to Religion	3

\* For additional humanities courses, please contact the College of Pharmacy.

**Social and Behavioral Sciences:**

Two transferrable courses from any of the following prefixes: ASB, ASM, COM, HIS, POS, PSY, SOC.

**Pre-Physical Therapy**

Working within the scope of a physical therapy practice act, physical therapists identify, prevent, and rehabilitate dysfunction of the structural and physiological systems of the body. Through various evaluation and therapeutic procedures, physical therapy optimizes the function of individuals with impairment of the neurological, musculoskeletal, cardiovascular, and pulmonary systems.

Physical therapists work in settings such as general hospitals, rehabilitation centers, private offices, schools, home health care agencies, and universities. The ability to work with a varied patient population in diverse practice settings contributes to the challenging and stimulating nature of the physical therapy profession.

All persons practicing physical therapy in the state of Arizona must be licensed by the Arizona Board of Physical Therapy Examiners. Licensure requirements include graduation from an accredited physical therapy program and successful completion of an examination administered by the board.

With the increase of rehabilitation programs and with the expansion of facilities for the elderly, the disabled, and the chronically ill, new positions for physical therapists should be created. Related specialties are in pediatrics, geriatrics, amputations, arthritis, and spinal cord injuries.

**Program Description:** This is a suggested curriculum for the first two years of courses that would prepare students for a physical therapy program. The program at Northern Arizona University is now a master's program. An applicant must earn a Bachelor of Science degree before applying to the program. This program is extremely competitive (300 applicants for 40 positions.) Students are urged to choose a specific professional school as soon as possible, and to consult with a faculty advisor in planning a program which will meet the entrance requirements of that school.

<b>Program Recommendations:</b>		<b>Credits</b>
+ BIO201	Human Anatomy and Physiology I	4
+ BIO202	Human Anatomy and Physiology II	4
+ CHM151	General Chemistry I (3) <b>and</b>	
+ CHM151LL	General Chemistry I Laboratory (1)	4
+ CHM152	General Chemistry II (3) <b>and</b>	3
+ CHM152LL	General Chemistry II Laboratory (1)	4
+ CHM230	Fundamental Organic Chemistry (3) <b>and</b>	
+ CHM230LL	Fundamental Organic Chemistry Laboratory (1)	4
+ MAT187	College Algebra and Trigonometry	5
+ PHY111	General Physics I	4
+ PHY112	General Physics II	4

**General Studies Requirements:**

See approved list for AA degree.

The following course is recommended within the General Education requirements in this program. Students transferring to NAU must complete upper division General Education credits approved by NAU before they apply to NAU's program. Social and Behavioral Sciences:

PSY101	Introduction to Psychology (recommended)	3
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Kirkville College through Grand Canyon University is offering several masters programs in related fields. They are:

- Physical Therapy (50 students/year)
- Occupational Therapy (30 students/year)
- Physicians Assistant (25 students/year)
- Sports Health Medicine (15 students/year)

Because of the prerequisites at Grand Canyon for their pre-health programs, it is strongly suggested to see an advisor at Grand Canyon to plan courses to take at the community college. Any preparatory science and math through algebra and trigonometry, as well as other nons-science credits should be taken at the community college.

## Pre-Law

**Student Goals:** Transfer

General information for students planning a career in Law:

No formal pre-law course of study is required to be eligible to apply for admission to law school. The demands of law are so varied that no one course of preparation can possibly be regarded as exclusive, and law schools attempt to do no more than urge students aiming toward a legal career to acquire a liberal education to the fullest sense of that term. Legal educators agree that a pre-legal education should be geared to the development of:

- a broad cultural background
- habits of thoroughness, intellectual curiosity, and scholarship
- ability to organize materials and communicate the results, both in writing and orally

Since the lawyer's principal tools are the abilities to analytically think and communicate, every student should be particularly well-grounded in the use of language. The ability to write clearly, concisely, and with a sense of style is highly desirable. Therefore, courses in English composition and literature beyond the bare minimal requirements are recommended as well as courses which develop a lucid writing style.

A broad liberal arts education which is calculated to provide understanding of institutions and values with which the law deals is excellent preparation for a career in law. The habits of reading widely and writing clearly are tied closely to the development of the capacity to absorb abstract ideas and to reason systematically. Study in the areas of government, history, philosophy, psychology, sociology, economics, and literature will all contribute to the deep understanding of our social, political, and economic institutions that every good lawyer must have. Law school admission committees give strong consideration to the following:

1. Scores on the Law School Admission Test (LSAT). A preparation course should be completed before taking the LSAT.
2. Overall academic performance for the full period of attendance in college. (Admission becomes increasingly more competitive each year and students should endeavor to keep grades at the highest possible level.)
3. Breadth in the undergraduate program in addition to the major field of study. Electives should include courses in speech as well as introductory courses in accounting. Courses at the undergraduate level in law are not essential since much of the material will be explored at a later time.
4. Ability to write correctly, clearly, and concisely. (Many law schools require demonstration of this ability as part of their admission test.)

5. General community involvement and/or personal achievement(s).
6. Many schools require character and personal references in addition to the above listed requirements. The study of law requires self-discipline and hard work which makes it important for students to develop good study habits in their academic career.

Special Qualifications for Law School:

1. The Law School Admissions Test (LSAT) is required for admission to College of Law at ASU, UA, and other universities. It is taken in the junior year.
2. Should have a high GPA in undergraduate course work.
3. Students must be able to read and comprehend well.
4. Students must have very good communication skills.

**Program Description:** This suggested program should be considered as the first two years of a baccalaureate program. Students should select an undergraduate major in liberal arts, business, or engineering. A business transfer program is especially recommended.

**Program Recommendations:**

**Credits**

Students should choose a major and consult with an advisor in planning their pre-law program. The following courses are recommended:

ACC211	Financial Accounting	3
+ ACC212	Managerial Accounting	3
BPC101AA	Introduction to Microcomputers I: IBM	1
COM100	Introduction to Human Communication	3
+ CRE101	Critical and Evaluative Reading I	3
ECN111	Macroeconomic Principles	3
ECN112	Microeconomic Principles	3
+ ENG101	First-Year Composition	3
+ ENG102	First-Year Composition	3
+ GBS233	Business Communication	3
HIS103	United States History to 1870	3
HIS104	United States History 1870 to Present	3
+ MAT122	Intermediate Algebra	3
PHI101	Introduction to Philosophy	3
PHI103	Introduction to Logic	3
POS110	American National Government	3
POS120	World Politics	3
PSY101	Introduction to Psychology	3
SOC101	Introduction to Sociology	3

## Psychology

**For Information: Deborah Van Marche**  
**Phone: 623.845.3740**

### Associate in Transfer Partnership Degree - Psychology (B.A. or B.S.)

**Student Goals:** Transfer to Arizona State University Main or Arizona State University West.

The Associate in Transfer Partnership Degree (ATP) is specifically developed for students who have identified Psychology (BA or BS) as a major and are planning to transfer to Arizona State University Main (ASUM) or Arizona State University West (ASUW).

The ATP degree requires a core of general education credits in the following general education categories: First-Year Composition (6 credits); Mathematics (3 credits); Natural Sciences (4 credits); and Humanities and Fine Arts/Social and Behavioral Sciences or related area general education requirements (6 credits). Also include in the ATP degree are the general education and major requirements to meet the lower division requirements of the major at the baccalaureate degree-granting institution. The ATP degree must consist of at least a minimum of 60 credit hours.

Students participating in the ATP degree will be treated as "native" students by the upper division institution in terms of course evaluation and course changes.

Advising is a critical element of the ATP degree, students must work closely with a community college program advisor. Upon completion of 36 hours students must receive formal MCCCD advising before the remainder of their classes can be scheduled. Students are responsible for periodic meetings with the community college advisor and, if/when determined necessary, with the appropriate baccalaureate degree-granting institution academic advisor.

**Associate in Arts (AA)/Transfer Program**

**Student Goals:** General Education, Transfer to a University, Personal Interest

Psychologists are concerned with the scientific study of the behavior of organisms. Psychology is a beneficial major or minor for students interested in education, medicine, law, social work, management, or any of the human service fields such as nursing, child care, medical technology, law enforcement, or real estate. Positions in the field of psychology as a psychologist require a graduate degree.

Employment will remain competitive in educational institutions but will show growth in clinical and industrial settings. Related careers include personnel management, public relations, sports and recreation, speech pathology, special education, counseling, vocational rehabilitation, gerontology, business management, and computer science.

**Program Description:** This program alone does not lead to employment in psychology. It is designed for students who wish to pursue a BA or BS degree in psychology at a university. Members of the Psychology Department should be consulted for more information about specific courses, transfer of courses, and detailed requirements for a psychology major or minor.

**Special Skill Levels Needed:** College level reading, writing, and math skills.

<u>Core Requirements:</u>	<u>Credits</u>
PSY101 Introduction to Psychology (SB)	3
+ PSY230 Introduction to Statistics (CS)	3
PSY231 Laboratory for Statistics	1
+ PSY290 Research Methods (L, SG)	4

**Electives:** Credits  
 The following courses are available as electives but should be chosen only sparingly by psychology majors. No more than one or two of these should be taken. (These courses are junior-senior level upper division courses at the universities and have no lower division equivalents there. If taken at GCC, they will count as lower division credit at the universities.)

PSY132 Psychology and Culture	3
PSY143 Lesbian, Gay, and Bisexual Studies (C)	3
PSY157 African/Black Psychology	3
+ PSY225 Psychology of Religion	3
+ PSY231 Laboratory for Statistics	1
PSY235 Psychology of Gender Differences *(SB,C)	3
+ PSY240 Developmental Psychology (SB)*	3
+ PSY241 Understanding and Changing Behavior	3
+ PSY242 Understanding and Changing Behavior Lab	1
+ PSY243 The Psychology of Developmental Disabilities	3
+ PSY244 Developmental Disabilities Internship	1
+ PSY250 Social Psychology	3
+ PSY260 Psychology of Personality (SB)*	3
+ PSY266 Abnormal Psychology (SB)*	3
+ PSY277 Psychology of Human Sexuality (SB)*	3
+ PSY293 Biological Psychology	3

\* (SB) counts at ASU as Social and Behavioral Science general education requirement. (C) counts as Cultural Awareness general education requirement. (CS) counts as Computer/Statistics, (L) counts for Literacy & Critical Inquiry, and (SG) counts for Natural Sciences-General general education requirements.

Typically psychology majors will need to take ten or more psychology courses for graduation with a BA or BS degree. At least five should be upper division courses at a university. Between three and five of those courses may be at the lower division (community college) level including the core requirements and suggested electives listed previously. Psychology majors should consult early with a departmental advisor about the math and science requirements and planning their course of study.

**Recommendations for Psychology Minors:**

A minor in psychology fits very well as a companion discipline with a wide variety of majors. Most universities will require five or six psychology courses for a minor; at least two of them should be at the upper division level at the university. Students wishing to minor in psychology should take PSY 101, and choose other courses from the following list, depending on university requirements:

+ PSY230 Introduction to Statistics (CS)	3
+ PSY231 Laboratory for Statistics	1
+ PSY240 Developmental Psychology (SB)*	3
+ PSY241 Understanding and Changing Behavior	3
+ PSY250 Social Psychology (SB)*	3
+ PSY260 Psychology of Personality (SB)*	3
+ PSY266 Abnormal Psychology (SB)*	3
+ PSY270 Personal and Social Adjustment (SB)*	3
+ PSY277 Psychology of Human Sexuality (SB)*	3
+ PSY280 Business Psychology (SB)*	3
+ PSY290 Research Methods (L,SG)	4
+ PSY293 Biological Psychology	3

**Personal Improvement and**

**Personal Interest Courses:**

With the numerous and varied demands of our complex world many of us face serious difficulties adjusting to and coping with the stresses and pressures of modern living. The following courses may be of considerable help in coping with such problems.

PSY123 Psychology of Parenting	3
PSY143 Lesbian, Gay, and Bisexual Studies (C)*	3
PSY156 Understanding Death and Dying	3
+ PSY215 Introduction to Sport Psychology (SB)*	3
+ PSY218 Health Psychology *(SB)	3
+ PSY235 Psychology of Gender Differences *(SB,C)	3
+ PSY245 Psychology of Adult Development *(SB)	3
+ PSY258 Domestic Problems and Crisis (SB)*	3
+ PSY270 Personal and Social Adjustment (SB)*	3
+ PSY277 Psychology of Human Sexuality (SB)*	3

**Developmental Disabilities Specialist  
Certificate  
14 credits**

**Program Description:** The program prepares students for employment in settings serving clients with developmental disabilities. Coursework combines theory and application. Academic preparation focuses on the physical and emotional correlates of developmental disability. Students also gain experience working in settings with persons with developmental disability.

**Required Courses: (11 credits) Credits**

Students must earn a grade of "C" or better in all Required Courses category.

PSY101	Introduction to Psychology	3
+ PSY241	Understanding and Changing Behavior	3
+ PSY242	Understanding and Changing Behavior Lab	1
+ PSY243	The Psychology of Developmental Disabilities	3
+ PSY244	Developmental Disabilities Internship	1

**Restricted Electives: (3 credits) Credits**

CFS114	Working with the Hyperactive Child	1
CFS176	Child Development	3
+ CFS185	Developing IEPs for Children with Disabilities	1
CFS257	Working with Families with Diverse Needs	3
+ CFS280	Children with Special Needs in Early Childhood Education	3
CFS290AA	Child Abuse: Identification and Reporting in Child Care Settings	1
CPD102AA	Assertiveness Training	2
CPD102AD	Eliminating Self-Defeating Behavior	2
CPD102AH	Stress Management	2
CPD102AS	Conflict Resolution	2
COM110	Interpersonal Communication	3
COM259	Communication in Business and Professionals	3
FON100	Introductory Nutrition	3
GBS132	Personal and Family Financial Security	3
HES154	First Aid/Cardiopulmonary Resuscitation	3
+ PSY240	Developmental Psychology	3
+ PSY266	Abnormal Psychology	3
+ PSY270	Personal and Social Adjustment	3
REC250	Recreation Leadership	3
SLG101	American Sign Language I	4
SPA115	Beginning Spanish Conversation I	3
+ SWU102	Introduction to Social Work	3
+ SWU280	Working with Juvenile Delinquents	3

**PSY102 Introduction to Psychology Lab 1 credit 1 period**

Optional laboratory designed to accompany Psychology 101. 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. (O)

**PSY123 Psychology of Parenting 3 credits 3 periods**

The demonstration and application of psychological principles to the development and guidance of children and adolescents. Prerequisites: None. (O)

**PSY132 Psychology and Culture 3 credits 3 periods**

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. (F,S,D,E)

**PSY143 Lesbian, Gay, and Bisexual Studies 3 credits 3 periods**

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. (F,S,E)

**PSY156 Understanding Death and Dying 3 credits 3 periods**

Designed to give the student an understanding of the research and theories of death, dying, and the bereavement process. Prerequisites: None. (F,D)

**PSY157 African/Black Psychology 3 credits 3 periods**

Historical overview of the development of Black Psychology and the African-American "frame of reference." Includes topics such as family, psychological assessment, mental health, male/female relationships, personality and community development as well as educational, ethical and contemporary issues. Critical examination of psycho-cultural forces which have helped to shape and determine the unique thought, styles, behavior of African-Americans and to gain a greater appreciation of the theories, research, writings, and activities of Black Psychologists. Prerequisites: None. (F,S,D)

**PSY215 Introduction to Sport Psychology 3 credits 3 periods**

Application of the physiological, behavioral, social, cognitive, and humanistic perspectives in psychology to sport. Includes topics such as optimal performance, correlation, motivation, co-action effect, self-actualization, psycho-behavioral techniques, self-efficacy, and the general health benefits of sport participation. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor. (F,S,D)

■ ■ ■ **Course Descriptions** ■ ■ ■

**Psychology (PSY)**

**PSY101 Introduction to Psychology 3 credits 3 periods**

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. (F,S,D,E,Su1,2)

**PSY218 Health Psychology 3 credits 3 periods**  
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. (O)

**PSY225 Psychology of Religion 3 credits 3 periods**  
Provides an introduction to the history, varieties and theories of the psychology of religion from an empirical, research-based perspective. Specific areas of study include the role of gender, age, socioeconomic status, and personality on religious experience, the effects of religion and prayer on mental and physical health, the development of religious thought and behavior over the lifespan, and the social psychology of new religious movements. In addition, the role of cultural differences on religious attitudes both within the USA and around the world is also addressed. Prerequisites: PSY101 or Permission of Instructor. (F,S,D)

**PSY230 Introduction to Statistics 3 credits 3 periods**  
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. (F,S,D,E,Su1,2)

**PSY231 Laboratory for Statistics 1 credit 2 periods**  
Applications of inferential and descriptive statistics to computers in the field of psychology. Prerequisites: None. Corequisites: PSY230. (F,S,D,E,Su1,Su2)

**PSY235 Psychology of Gender Differences 3 credits 3 periods**  
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. (F,S,D,E)

**PSY240 Developmental Psychology 3 credits 3 periods**  
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. (F,S,D,E,Su1,2)

**PSY241 Understanding and Changing Behavior 3 credits 3 periods**  
Theory and methods for observing, analyzing, and modifying behavior. Prerequisites: PSY101 with grade of "C" or better or permission of the instructor. (F,S,Su1,E)

**PSY242 Understanding and Changing Behavior Lab 1 credit 2 periods**  
Designed to apply the principles of behavior modification. Application of behavior modification principles, techniques, and treatment(s) to modify self-behavior or the behavior of others. Exposure to the "hands-on" application of behavioral programming, including the identification, development, implementation, assessment, and modification of a behavioral program. Prerequisites: PSY101. Prerequisites or Corequisites: PSY241. (F,S,Su1,E)

**PSY243 The Psychology of Developmental Disabilities 3 credits 3 periods**  
The interrelationships among the physical, intellectual, social, and psychological aspects of developmental disabilities (DD). Various service approaches, policies, and programs designed to foster an adequate adjustment for individuals with DD and their families. Values and beliefs relating to persons with developmental disabilities. Prerequisites: PSY101. (F,S,Su1,E)

**PSY244 Developmental Disabilities Internship 1 credit 1 period**  
Experience in working with persons with developmental disabilities and their families. 80 hours of designated work. Prerequisites: PSY101, PSY241, PSY242, and PSY243, and departmental approval. (F,S,Su1,E)

**PSY245 Psychology of Adult Development 3 credits 3 periods**  
Deals with adults in general as well as adults at three life stages: early, middle and later adulthood. Characteristics, life styles, activities and problems of adults as well as current theories and research. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor. (O)

**PSY250 Social Psychology 3 credits 3 periods**  
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. (F,S,E)

**PSY255 Psychology of the Information Age 3 credits 3 periods**  
Influences of the Information Age on human behavior, with an emphasis on technology related effects. Social and personal behaviors affected by technology, information availability, communication usage, and the potential future of technology. Effects of technology and information avoidance. Prerequisites: PSY101 with a grade of "C" or better, or equivalent, or permission of instructor. (O)

**PSY258 Domestic Problems and Crises 3 credits 3 periods**  
Acquaints personnel in Law Enforcement and related fields with techniques and agencies of domestic intervention. Considers such topics as family fights, child abuse, suicide, death, drug abuse and runaways. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor. (O)

**PSY260 Psychology of Personality** 3 credits 3 periods  
Introduction to theories of personality with emphasis upon application of specific theories towards the understanding of individuals. Prerequisites: PSY101 with a grade of "C" or better or permission of instructor. (O)

**PSY266 Abnormal Psychology** 3 credits 3 periods  
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. (F,S,D,E,Su1,Su2)

**PSY270 Personal & Social Adjustment** 3 credits 3 periods  
Surveys the basic mental health principles as they relate to coping with stress, interpersonal relationships, sex, marriage, and working. Emphasis on learning to become a more competent and effective person. Prerequisites: PSY101 with a grade of "C" or better or permission of the instructor. (O)

**PSY277 Psychology of Human Sexuality** 3 credits 3 periods  
Survey of psychological aspects of human sexual behavior. Emphasis placed on the integration of the cognitive, emotional, and behavioral factors in sexual functioning. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor. **Student must be 18 years or older.** (F,S,D,E)

**PSY280 Organizational Psychology** 3 credits 3 periods  
The application of psychological principles to business practices including advertising, marketing, negotiations, organization and personnel. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor. (O)

**PSY290AB Research Methods** 4 credits 6 periods  
**PSY290AC Research Methods** 4 credits 5 periods  
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. (F,S,D,E,SuE)

**PSY293 Biological Psychology** 3 credits 3 periods  
Biological foundations of sensation, perception, motivation, emotion, cognition and action. Designed for students in the life sciences. Prerequisites: PSY101 with a grade of "C" or better, or permission of instructor. (F,S,D)

**PSY298 Special Projects** 1-3 credits  
See page 278. (O)

## Public Relations

**For Information: Julie Knapp**  
**Phone: 623.845.3914**

**Student Goals:** Career-related

Public Relations specialists will be prepared for entry-level jobs in press relations, community or consumer relations, market research, small publication production, political campaigns, fund raising, and volunteer recruitment. Jobs in public relations and related occupations will accompany growth in business and industry.

**Program Description:** This program is designed to provide students with journalism, photography, business, and communications skills that will prepare them for entry-level employment in press relations, community or consumer relations, market research, in-house publications, political campaigns, fund raising, and volunteer recruitment.

Students will compile a portfolio of their news and feature writing, photography, publications designs, plans for events and advertising designs. The portfolio will include both published and unpublished work.

**Note:** Required courses may not be available every semester. Students should consult with a department advisor in planning their academic schedule in order to complete degree requirements in an expedient manner. Degree-seeking students may find it necessary to extend completion time lines and attend both day and evening classes.

## Public Relations Associate in Applied Science 65 credits

**Program Description:** This program is designed to provide students with journalism, photography, business, and communication skills that will prepare them for entry-level employment in press relations, community or consumer relations, market research, in-house publications, political campaigns, fund raising and volunteer recruitment. Students will compile a portfolio of their news and feature writing, photography, publications designs, plans for events and advertising designs. The portfolio will include both published and unpublished work.

**Required Courses:** (33 credits) **Credits**  
Students must have a grade of "C" or better for each course listed in the Required Courses category.

ART131	Photography I	3
BPC138AB	Macintosh Desktop Publication	3
JRN133	Development of Small Publications	3
+ JRN234	Feature Writing	3

JRN201	News Writing	3
JRN215	News Production	3
+ JRN235	Practicum: Public Relations	3
MCO110	Introduction to Mass Communications (3) <u>or</u>	
MCO120	Media and Society (3)	3
MKT101	Introduction to Public Relations	3
MKT271	Principles of Marketing	3
VPT104	Scriptwriting	3

<b>Restricted Electives: (7 credits)</b>		<b>Credits</b>
ADA102	Advertising Production Methods	3
ADA114	Graphics Printing Processes	3
+ ART135	Photojournalism I	3
BPC238AB	Macintosh Advanced Desktop Publication	3
CWE198	Career/Work Experience (1-3) <u>or</u>	
JRN240	Journalism Internship (1-3)	1-3
GBS151	Introduction to Business	3
+ GBS233	Business Communication	3
JRN298	Special Projects	1-3
MKT263	Advertising Principles	3
VPT102	Video Technology (3) <u>or</u>	
VPT108	Video Production	3

**General Studies Requirements: (25 credits)**

<b>Core: (15 credits)</b>		<b>Credits</b>
<b>First-Year Composition:</b>		<b>6</b>
+ ENG101	First-Year Composition (3) <u>and</u>	
+ ENG102	First-Year Composition (3) <u>or</u>	
+ ENG111	Technical Writing (3)	
<b>Oral Communication:</b>		<b>3</b>
Any approved course, see page 77.		
<b>Critical Reading:</b>		<b>3</b>
+ CRE101	Critical and Evaluative Reading I (3) <u>or</u>	
+ CRE111	Critical Reading for Business and Industry (3)	
<b>Mathematics:</b>		<b>3</b>
+ MAT102	Mathematical Concepts/Applications (3) <u>or</u>	
+ MAT122	Intermediate Algebra (3) <u>or</u> Equivalent	
<b>Distribution: (10 credits)</b>		<b>Credits</b>
<b>Humanities and Fine Arts:</b>		<b>3</b>
Any approved course, see page 77.		
<b>Natural Sciences:</b>		<b>4</b>
Any approved course, see page 78.		
<b>Social and Behavioral Sciences:</b>		<b>3</b>
Any approved course, see page 77.		

## Reading

**For Information: Frederica Johnson**  
Phone: 623.845.3751

Learning to read well is a lifetime process. Reading courses provide opportunities for greater mental growth by improving reading skills and study techniques. A variety of courses ranging from basic to advanced are offered to meet the specific needs of all levels of readers. CRE101 is a required course for students seeking the AA or AGS, and CRE101 or 111 for the AAS degree.

**Transferability:** Courses numbered 100 or above transfer as electives.

### ■ ■ ■ Course Descriptions ■ ■ ■

#### Critical Reading (CRE)

**CRE101 Critical and Evaluative Reading I**      3 credits      3 periods

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. (F,S,D,E,Su1,2)

**CRE111 Critical Reading for Business and Industry**      3 credits      3 periods

Emphasis on reading skills required for success in business and technology. Includes interpretation of technical and professional materials with an emphasis on critical analysis and reading. Prerequisites: Reading (ASSET) test score, or grade of "C" or better in RDG091, or permission of instructor. (F,S,D,E)

#### Reading Education (RDG)

**RDG008 Phonics**      3 credits      3 periods

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.