

BACKGROUND:

Pima Community College (PCC) has approved the following courses for Dual Enrollment. These courses will be offered at Ironwood Ridge High School, starting in SY2020-21. The courses outlined below will create a direct pathway for the partial of full completion of Pima's Arizona General Education Certificate (AGEC) or Associate's Degree. Additionally, courses would contribute to satisfying the requirement for a Certified Nursing Assistant (CNA) or Licensed Practical Nurse (LPN). Several courses could directly connect to our JTED/CTE course offerings.

ART100 Basic Design

Credit Hours: 3.00

Course would qualify as a:

Art requirement (1.0 Credit) [Year]

Introduction to the elements and principles of visual design. The course includes:

- Identifying and interpreting creative problems
- Emphasizing art and design skills
- Writing reviews of gallery visits/museum visits/artist lectures
- Articulating and demonstrating progressive skills in their own work
- Participating in individual and group critiques
- Relating their work on a conceptual, interpersonal and global level.

Prerequisite(s):

Gen Ed: Meets AGEC – FA; Meets CTE - A&H.

ART105 Exploring Art and Visual Culture

Credit Hours: 3.00

Course would qualify as a:

Art requirement (1.0 Credit) [Year]

Exploration of historical and contemporary art and the visual image within the context of global culture. The course includes:

- Selective perception
- Formal analysis
- Materials and techniques
- Art and visual culture in a historical and contemporary framework
- Museum, galleries, and public spaces.

Prerequisite(s):

Gen Ed: Meets AGEC - FA and G; Meets CTE - A&H or SBS and G.

ASL101 American Sign Language I

Credit Hours: 4.00

Course would qualify as a:

Foreign Language (1.0 Credit) [Year]

Introduction to American Sign Language (ASL). This course includes:

- Parameters
- Syntax
- Sentence types
- Facial expressions and body language
- Pronominalization
- Nouns and verbs
- Modals
- Sign space
- Time line and time modulations
- Classifiers
- Pluralizations
- Deaf history and culture.
- Fingerspelling numbers
- Lexicalized fingerspelling
- Conceptual accuracy
- Sign modulation
- Conversational regulators
- Basic compounds and contractions
- Existence of regional dialects/sign and language variations.

Because language and culture are inextricably linked, this course will also demonstrate how ASL conveys the values, beliefs, customs, and history of American Deaf culture.

Prerequisite(s):

Gen Ed: Meets AGEC – OTHER and C; Meets CTE - A&H and C.

BIO160IN Introduction to Human Anatomy and Physiology**Credit Hours: 4.00****Course would qualify as a:** Science requirement (1.0 Credit) [Year]

Structure and dynamics of the human body. This course includes:

- Foundations such as chemical, cellular and tissue levels of organization.
- Major structures and functions of the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems.

Prerequisite(s):

Gen Ed: Meets AGEC – SCI; Meets CTE - M&S.

BIO181IN General Biology I: (Majors)**[SUN# BIO1181]****Credit Hours: 4.00****Course would qualify as a:** Science requirement (.50 Credit) [Semester]

Principles of structure and function of living things at the molecular and cellular levels of organization. This course includes:

- Introduction to the scientific process
- Scientific measurements and laboratory techniques
- Chemistry of cells, organization of cells
- Metabolism
- Cell communication
- Patterns of cell division
- Patterns of inheritance
- Nucleic acids
- Gene expression
- Biotechnology.

Prerequisite(s): MAT 097 with a grade of C or better or placement into MAT 151 or higher, and REA 091 with a grade of C or better or placement into REA 112.

Gen Ed: Meets AGEC - SCI; Meets CTE M&S

BIO182IN General Biology II: (Majors)**[SUN# BIO1182]****Credit Hours: 4.00****Course would qualify as a:** Science requirement (.50 Credit) [Semester]

Principles of living things at the levels of organism, population, community, and ecosystem. This course includes:

- Evolution of life
- Classification of organisms
- Survival strategies
- Interactions between organisms and with their environment
- Ecosystem structure
- Human impacts upon the biosphere.

Prerequisite(s):

Gen Ed: Meets AGEC - SCI; Meets CTE M&S

BIO201IH Human Anatomy, Physiology and Histology**Credit Hours: 3.00****Course would qualify as a:** Science requirement (.50 or 1.0 Credit) [Semester or Year]

Structure and function of the body. This course includes:

- Introduction to the scientific process
- Scientific measurements
- Laboratory techniques such as microscope use
- Levels of organization
- Chemistry as applied to physiology, cell biology, gene regulation, homeostasis, anatomical terms, integumentary system, skeletal system and articulations, muscular and nervous systems, and special senses, as well as histology of these systems.

Prerequisite(s): Completion of MAT 092 or MAT 097 or placement into MAT 142 or MAT 151; and REA 091 with a C or better or placement into REA 112; and WRT 090 or 096 with a grade of C or better or placement into WRT 101.

Course Corequisites:

Information: This course combines elements from BIO 156IN and meets the prerequisites for BIO 202IN.

Gen Ed: Meets AGEC - SCI; Meets CTE - M&S.

BIO202IN Human Anatomy and Physiology II**Credit Hours: 4.00****Course would qualify as a:** Science requirement (.50 or 1.0 Credit) [Semester or Year]

Continuation of BIO 201IN/IH. This course includes:

- The structure and function of the endocrine cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems.

Prerequisite(s): BIO 201IN or 201IH with a grade of C or better.

Gen Ed: Meets AGEC – SCI; Meets CTE - M&S.

CHM151IN General Chemistry I**[SUN# CHM1151]****Credit Hours: 4.00****Course would qualify as a:** Science requirement (1.0 Credit) [Year]

Introduction to the foundations of chemistry for upper-level sciences and engineering. This course includes:

- Atomic structure, chemical bonding, reaction stoichiometry, behavior of gases, and reactions in solutions.
- An introduction to thermochemistry.

Prerequisite(s): CHM 080 with a grade of C or better or minimum score on CHM Assessment Test; and MAT 151 or 188 or higher with a grade of C or better, or required score on the mathematics placement test. NOTE: Students receiving a grade of C in CHM 080 or the CHM placement test will be required to register for the CHM 151RC course concurrently. For students receiving a B or higher in CHM 080 or the CHM placement test, CHM 151RC is optional but highly recommended

Gen Ed: Meets AGEC - SCI; Meets CTE - M&S.

CHM152IN General Chemistry II**[SUN# CHM1152]****Credit Hours: 4.00****Course would qualify as a:** Science requirement (1.0 Credit) [Year]

Continuation of CHM 151IN. Topics addressed in this course include:

- Emphasis on certain chemical concepts such as chemical kinetics, equilibrium, acids and bases, thermodynamics, and electrochemistry.

Prerequisite(s): With a grade of C or better: CHM 151IN, and either MAT 151 or 189 or higher, or required score on the mathematics placement test. NOTE: Students receiving a grade of C in CHM 151IN will be required to register for the CHM 152RC course concurrently. For students receiving a grade of B or higher in CHM 151IN, the CHM 152RC course is optional but highly recommended.

Gen Ed: Meets AGEC - SCI; Meets CTE - M&S.

DAR128 Digital Photography I**Credit Hours: 4.00****Course would qualify as a:****CTE requirement (1.0 Credit) [Year]**

Introduction to digital photography emphasizing the technical and aesthetic issues and how these qualities form image content. This course includes:

- Adobe Photoshop basics, history of still photography, applications of digital cameras, aspects of the digital medium, camera and computer equipment requirements, digital still camera, memory and file formats, digital still camera lenses, and proper exposure.
- Light, color, and temperature; depth of field, shutter speed effects, proper use of digital photography, lighting for digital stills, elements of composition, photographic rendering and reality, outputting and publishing, portfolio preparation, and career options in digital photography.

Prerequisite(s):**ECN150 An Economic Perspective****Credit Hours: 3.00****Course would qualify as a:****Economics requirement (.50 Credit) [Semester]**

The study of the interactions of individuals and societies from the viewpoint of economics. This course includes:

- The philosophy of economics
- The history of economic thought
- Conventional economic theory
- Questions of equity versus efficiency
- Contemporary economic issues
- Microeconomics
- Macroeconomics
- The individual and our democracy.

Prerequisite(s):

Gen Ed: Meets AGEC – SBS and G; Meets CTE - SBS and G.

FSN127IN Human Nutrition and Biology**Credit Hours: 4.00****Course would qualify as a:****Elective (1.0 Credit) [Year]**

Principles of nutrition presented in the context of human biology. This course includes:

- Chemistry, digestion, absorption, and metabolism of nutrients.
- Biological and nutritional perspectives on various health issues such as cardiovascular disease, hypertension, cancer, diabetes, and osteoporosis, including genetic and epigenetic effects.
- Analysis of scientific studies relating to nutrition.

Prerequisite(s):

Information: Same as BIO 127IN.

Gen Ed: Meets AGEC – SCI; Meets CTE - M&S.

HCA100 Orientation to Human Anatomy and Physiology**Credit Hours: 3.00****Course would qualify as a:****CTE requirement (1.0 Credit) [Year]**

Introduction to strategies to aid in acclimation and success for health-related professions students throughout their respective program. This course includes:

- Outline and review of program pathway
- Strategies for success, learning styles, stress management, critical thinking, and professionalism.

Prerequisite(s):

Information: Students must be admitted to the selected program and obtain consent of the program department before enrolling in this course.

HCA119 Orientation to Human Anatomy and Physiology**Credit Hours: 3.00****Course would qualify as a:** CTE requirement (1.0 Credit) [Year]

Orientation to basic anatomy and physiology appropriate for the health care setting. This course includes:

- Structural organization of the human body, body systems, major organs, and common pathology.
- CLIA waived testing and analysis used to determine common disease.

Prerequisite(s):

Course Corequisites:

HIS141 History of the United States I**[SUN# HIS1131]****Credit Hours: 3.00****Course would qualify as a:** U.S. History requirement (.50 Credit) [Semester]

Survey of the major developments in American history from the Columbian voyages to the Era of Reconstruction. This course includes:

- Colonial America
- The Formative Years - 1776-1815
- The Early National Period - 1815-1850
- The coming of the Civil War and its aftermath.
- The social, intellectual, and political aspects of early American life.

Prerequisite(s):

Course Corequisites:

Gen Ed: Meets AGEC – HUM or SBS and C, G; Meets CTE - A&H or SBS and C, G.

HIS142 History of the United States II**[SUN# HIS1132]****Credit Hours: 3.00****Course would qualify as a:** U.S. History requirement (.50 Credit) [Semester]

Survey of the major developments in American history from era of Reconstruction to the present. This course includes:

- The era of Reconstruction
- The emergence of modern America
- The Early 20th Century
- America as a world power.
- The social, intellectual, and political aspects of contemporary American life.

Prerequisite(s):

Course Corequisites:

Gen Ed: Meets AGEC – HUM or SBS and C, G; Meets CTE - A&H or SBS and C, G.

MAT142 Topics in College Mathematics**[SUN# MAT1142]****Credit Hours: 3.00****Course would qualify as a:** Advanced Algebra II – Math requirement (1.0 Credit) [Year]

Survey of mathematical topics and applications. This course includes:

- Application of probability
- Statistics
- Finance
- Growth models.

Prerequisite(s): Within the last three years: MAT 092 with a C or better or completion of module 25 in MAT 089A or 089B or required score on the Mathematics assessment exam.

Information: Equivalent to MAT 141

Gen Ed: Meets AGEC – MATH; Meets CTE - M&S.

MAT151 College Algebra
Course would qualify as a:

[SUN# MAT1151]

Credit Hours: 4.00

College Algebra – Math requirement (1.0 Credit) [Year]

Introduction to college-level algebra. Concepts covered includes:

- Functions
- Exponential and logarithmic functions
- Linear 2x2 and higher systems
- Graphing
- Calculator use (A graphing calculator is required.)

Prerequisite(s): Within the last three years: MAT 095 or 097 or 122 or 122Z or 123 with a C or better, or required score on the Mathematics assessment test.

Gen Ed: Meets AGEC – MATH; Meets CTE - M&S.

MUS102 Music Fundamentals

Credit Hours: 3.00

Course would qualify as a:

Art requirement (1.0 Credit) [Year]

Introduction to fundamentals of music designed to develop basic literacy in music. This course includes:

- Definitions and notation
- Rhythm and meter
- Intervals
- Scales and transposition
- Key signatures
- Triads
- Chords and harmony
- Simple forms.

Prerequisite(s):

Gen Ed: Meets AGEC – FA or HUM; Meets - CTE - A&H.

NRS104 Nursing Process I

Credit Hours: 4.00

Course would qualify as a:

CTE requirement (1.0 Credit) [Year]

NRS 104 introduces the student to the application of the nursing process and to the concepts of client, health, environment and nurse, with emphasis on caring for the adult and older adult client. This course introduces the student to behaviors that serve as the basis of effective nursing practice including a safe practitioner, an effective communicator, a manager and teacher, a culturally competent/caring healthcare provider, and professional and ethical issues of being a nurse. The student applies nursing theory in the college laboratory and the clinical setting while caring for adults and older adults in long term care and community environments.

Prerequisite(s):

Course Corequisites: HCA 100, NRS 104LC, NRS 104LS, NRS 108, NRS 155

Information: Acceptance into the Associate of Applied Science in Nursing; PN Exit Option through the selective admissions process including the required preparatory and prerequisites to apply to the program. Students must be admitted to the PCC Nursing program and obtain consent of the Nursing Department before enrolling in this course.

NRS104LC Nursing Process I Clinical Lab

Credit Hours: 3.00

Course would qualify as a:

CTE requirement (1.0 Credit) [Year]

This is the Clinical Lab portion of NRS 104.

Prerequisite(s):

Course Corequisites: HCA 100, NRS 104, NRS 104LS, NRS 108, NRS 155

Information: Acceptance into the Associate of Applied Science in Nursing; PN Exit Option through the selective admissions process including the required preparatory and prerequisites to apply to the program. Students must be admitted to the PCC Nursing program and obtain consent of the Nursing Department before enrolling in this course.

NRS104LS Nursing Process I Skills Lab**Credit Hours: 1.00****Course would qualify as a:**

CTE requirement (1.0 Credit) [Year]

This is the Skills Lab portion of NRS 104.**Prerequisite(s):**

Course Corequisites: HCA 100, NRS 104, NRS 104LC, NRS 108, NRS 155

Information: Acceptance into the Associate of Applied Science in Nursing; PN Exit Option through the selective admissions process including the required preparatory and prerequisites to apply to the program. Students must be admitted to the PCC Nursing program and obtain consent of the Nursing Department before enrolling in this course.**NRS105 Nursing Process II****Credit Hours: 4.00****Course would qualify as a:**

CTE requirement (1.0 Credit) [Year]

Continuation of NRS 104. Application of the nursing process and expansion on the concepts of client, health, environment and nurse, with emphasis on caring for adult clients with common health alterations. Expansion of behaviors that are the basis of effective nursing practice including safe practitioner, effective communicator, manager and teacher, a culturally competent and caring healthcare provider, and professional and ethical issues of being a nurse. Also includes additional application of theory in the college laboratory and the clinical setting in acute care environments.

Prerequisite(s): HCA 100, NRS 104, 104LC, 104LS, 108, 155, and WRT 102.

Course Corequisites: NRS 105LC, NRS 105LS

Information: Students must be admitted to the PCC Nursing program and obtain consent of the Nursing Department before enrolling in this course.**NRS105LC Nursing Process II Clinical Lab****Credit Hours: 4.00****Course would qualify as a:**

CTE requirement (1.0 Credit) [Year]

This is the clinical lab portion of NRS 105.**Prerequisite(s):** HCA 100, NRS 104, 104LC, 104LS, 108, 155, and WRT 102.

Course Corequisites: NRS 105, NRS 105LS

Information: Students must be admitted to the PCC Nursing program and obtain consent of the Nursing Department before enrolling in this course.**NRS105LS Nursing Process II Skills Lab****Credit Hours: 1.00****Course would qualify as a:**

CTE requirement (1.0 Credit) [Year]

This is the Skills Lab portion of NRS 105.**Prerequisite(s):** HCA 100, NRS 104, 104LC, 104LS, 108, 155, and WRT 102.

Course Corequisites: NRS 105, NRS 105LC

Information: Students must be admitted to the PCC Nursing program and obtain consent of the Nursing Department before enrolling in this course.

PHY121IN Introductory Physics I**[SUN# PHY1111]****Credit Hours: 4.00****Course would qualify as a:****Science requirement (1.0 Credit) [Year]**

Introduction to general physics for programs requiring a one -year, non-calculus based physics course. Topics covered includes:

- The nature of physics
- Linear motion and kinematics
- Dynamics
- Work and energy
- Linear momentum
- Rotational motion
- Heat
- States of matter
- Waves and sound.

Prerequisite(s): With a grade of B or higher: completion of MAT 189 or higher; or required score on Mathematics assessment test. Students receiving a grade of C in MAT 187 or 189 or higher will be required to register for the PHY 121RC course concurrently; for students receiving a grade of B or higher in MAT 187 or 189, PHY 121RC course is optional but highly recommended.

Gen Ed: Meets AGEC – SCI; Meets CTE - M&S.

POS100 Introduction to Politics**Credit Hours: 3.00****Course would qualify as a:****American Government requirement (.50 Credit) [Semester]**

This course covers the following topics:

- Issues, principles, and trends in political science
- Politics and political science
- Political philosophy and ideology
- Comparative politics
- American national government
- International relations.

Prerequisite(s):

Course Corequisites:

Gen Ed: Meets AGEC – SBS; Meets CTE - SBS.

PSY101 Introduction to Psychology**[SUN# PSY1101]****Credit Hours: 3.00****Course would qualify as a:****Foreign Language (1.0 Credit) [Year]**

This course addresses the following information and topics:

- Survey of psychology including history, perspectives, and methods
- Structure and functions of the nervous and endocrine systems
- Development
- Perception
- Learning; memory
- Intelligence, thinking and language
- Motivation and emotion
- Personality
- Psychopathology
- Psychotherapy
- Stress and health
- Social cognition and behavior.

Prerequisite(s):

Course Corequisites:

Gen Ed: Meets AGEC – SBS; Meets CTE - SBS.

SPA101 Elementary Spanish I**[SUN# ENG1101]****Credit Hours: 4.00****Course would qualify as a:**

Foreign Language (1.0 Credit) [Year]

Introduction to Spanish. Topics covered in this course include:

- Basic listening, reading, and writing skills
- Cultural and geographic awareness.

Prerequisite(s): Required score on Spanish assessment test.

Gen Ed: Meets AGEC – OTHER; Meets CTE - A&H.

SPA102 Elementary Spanish II**[SUN# SPA1102]****Credit Hours: 4.00****Course would qualify as a:**

Foreign Language (1.0 Credit) [Year]

Continuation of SPA 101. Topics covered in this course include:

- Further development of oral and written forms
- Additional grammatical structures, interpersonal transactions, and geographical and cultural differences.
- Emphasis on balancing more complex structures with active communication.

Prerequisite(s): SPA 101 or required score on Spanish assessment test.

Information: Prerequisite(s) may be waived with one year of high school Spanish. See an instructor, advisor, or counselor.

Gen Ed: Meets AGEC – OTHER; Meets CTE - A&H.

WRT101 English Composition I**[SUN# ENG1101]****Credit Hours: 3.00****Course would qualify as a:**

English 12 – English requirement (.50 Credit) [Semester]

Principles and practices of college-level writing. This course includes:

- Critically reading college texts
- Writing college-level essays using a variety of strategies
- Practicing diverse writing processes
- Using research effectively.

Prerequisite(s): Requires both Reading and Writing prerequisites. Reading: With a C or better REA 091 or concurrent enrollment, or placement into REA 112. Writing: With a C or better WRT 090 or 090P or 090S or with a B or better ESL 088WG, or placement into WRT 101.

Gen Ed: Meets AGEC - ENGL; Meets CTE - COMM.

WRT102 English Composition II**[SUN# ENG1102]****Credit Hours: 3.00****Course would qualify as a:**

English 12 – English requirement (.50 Credit) [Semester]

Continuation of WRT 101. This course includes:

- Reading, analyzing, and discussing various types of text
- Writing analytical or critical papers
- Developing research skills.
- This course includes writing a research paper.

Prerequisite(s): With a C or better: WRT 101, 101S, or 107.

Gen Ed: Meets AGEC – ENGL; Meets CTE - OTHER.