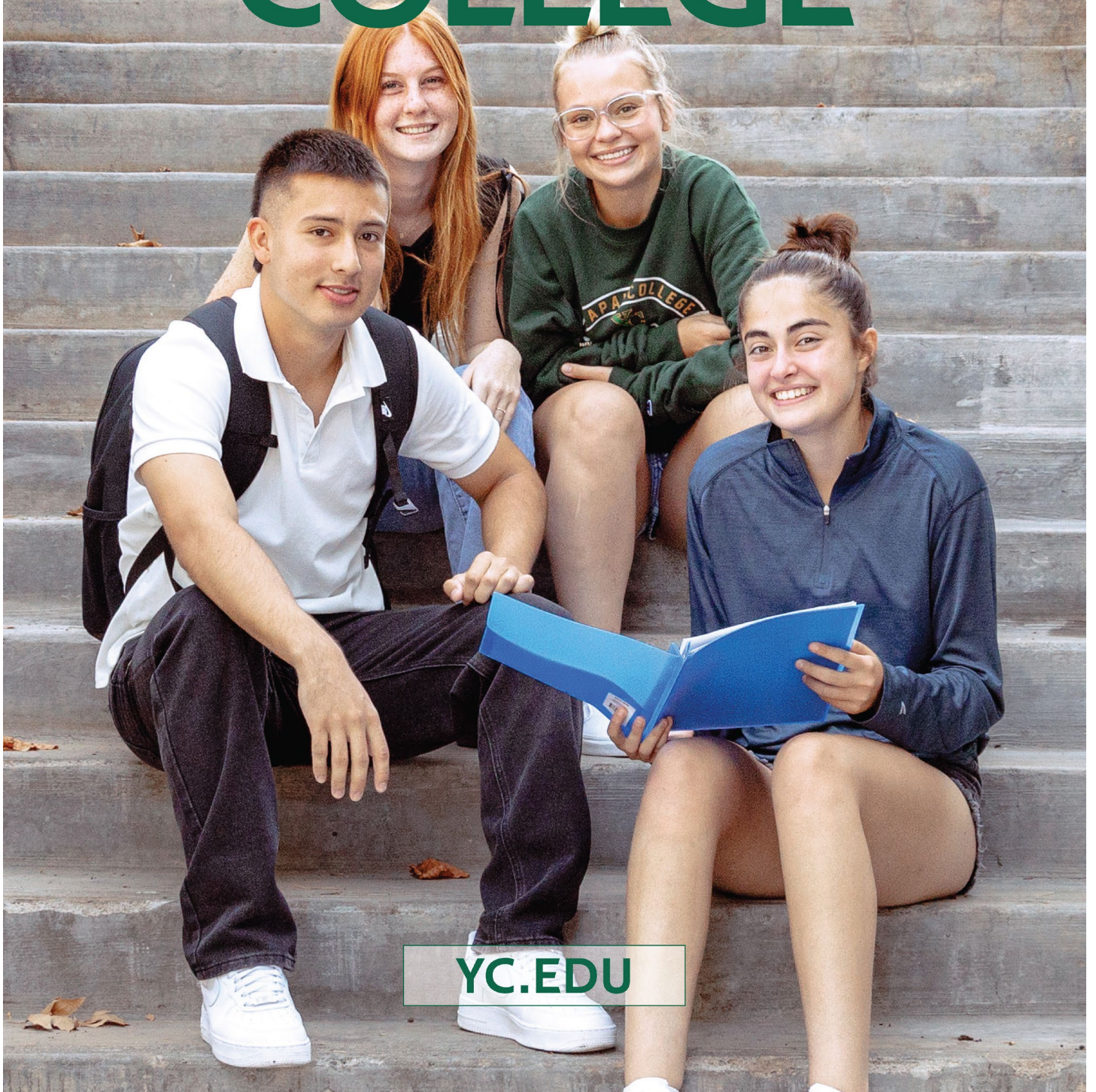


YAVAPAI COLLEGE

2025-2026 ACADEMIC CATALOG



YC.EDU

Contents

Campus and Center Locations	6
Affiliation and Accreditation	7
Equal Opportunity Statement	7
Welcome from the President	8
About YC	9
College Mission, Values, and Strategic Goals & Initiatives	9
District Governing Board	10
College Administration	10
Yavapai College Foundation	11
Program Accreditation	12
Academic Calendar	14
Academic Information	15
Methods of Instruction and Meeting Types	16
Prior Learning Assessment & Credit for Exams	19
Admission, Registration & Records	28
Admission	28
Registration	32
Records	35
Student Rights & Responsibilities	38
Student Resources	46
Earning a Degree or Certificate	57
General Education	62
Degrees & Certificates by Program Type	67
Degrees & Certificates	70
Associate Degrees	70
Arizona General Education Curriculum Certificate	83
Associate of Applied Science Degrees	85
Bachelor's Degrees	118
Certificates	130
Course Listings	220
Accounting	220
Air Force Leadership	224
Agriculture Canine	228
Agriculture Equine	230
Agricultural Science	232

Allied Health Services	236
Automated Industrial Technology	240
Administration of Justice	241
Anthropology	246
Art	249
American Sign Language	261
Automotive	263
Aviation	268
Behavioral Health Sciences	273
Biology.....	275
Brewing	278
Business Administration.....	280
Construction Building Technology	284
Commercial Driver Training	287
Chemistry	288
College Honors Program	290
Computer Numerical Control.....	290
Computer Networking Technology.....	292
Communications	296
Career and Personal Development	297
Computer Systems and Application	298
Computer Science	304
Culinary Arts.....	306
Dance	308
Early Childhood Education	310
Economics	314
Education	315
Engineering	318
Electronics Technology	319
Emergency Medical Services.....	324
English	332
Entrepreneur's Institute.....	340
Electric Utility	340
Exercise and Wellness	341
Film and Media Arts	344
Fire Science	350
Geography.....	353

Geology	355
Gunsmithing.....	356
History	360
Humanities	361
Heating, Ventilation and Air Conditioning	363
Imaging Continuing Education	365
Industrial Plant Technology	367
Paralegal Studies	368
Leadership	374
Licensed Practical Nursing	377
Mathematics	379
Manufacturing Engineering Tech.....	385
Management.....	386
Marketing.....	391
Military Science Leadership ROTC	393
Motorcycle Technology.....	395
Music.....	395
Media and Extended Realities	402
Nursing	403
Nutrition.....	410
Physical Education	411
Philosophy.....	413
Physics.....	416
Political Science.....	418
Psychology	419
Radiologic Technology	423
Recreation Management	428
Religious Studies	428
Sociology	431
Spanish	433
Student Success Skills.....	436
3-D Printing	437
Theater	438
Unmanned Aircraft System.....	443
Viticulture and Enology	445
Video Game Development.....	448
Welding	451

Emeriti Directory.....	454
Glossary of Terms.....	456
Professional Licensure Disclosure	463

About the Catalog

The YC Catalog is the official source of the college's academic programs, courses, policies, and procedures. The catalog should be used as a guide in planning a course of study.

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

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

Campus and Center Locations

Prescott Campus

1100 East Sheldon Street
Prescott, Arizona 86301
Switchboard: 928.445.7300

Verde Valley Campus

601 Black Hills Drive
Clarkdale, Arizona 86324
Reception: 928.634.7501

Prescott Valley Center

3800 North Glassford Hill Road
Prescott Valley, Arizona 86314
Switchboard: 928.445.7300

Career & Technical Education Center

220 Ruger Road
Prescott, Arizona 86301
Reception: 928.776.2002

Chino Valley Agribusiness & Science Technology Center

2275 Old Home Manor Way
P.O. Box 4048
Chino Valley, Arizona 86323
Reception: 928.717.7720

Sedona Center

4215 Arts Village Drive
Sedona, Arizona 86336
Reception: 928.649.4265

For callers outside the 928 area code, please call 1.800.922.6787

The following locations are high school locations that offer Yavapai College programs to their students:

Bagdad High School

500 Sultan Way
Bagdad, Arizona 86321

Bradshaw Mountain High School

6000 E Long Look Dr.
Prescott, Arizona 86314

Camp Verde High School

1323 S Montezuma Castle Highway
Camp Verde, Arizona 86322

Chino Valley High School

760 E Center St.
Chino Valley, Arizona 86323

Mayer High School

17300 E Mule Deer Dr.
Spring Valley, Arizona 86333

Mingus Union High School

1801 E Fir St.
Cottonwood, Arizona 86326

Prescott High School

1050 Ruth St.
Prescott, Arizona 86301

Tri City Prep High School

5522 Side Rd.
Prescott, Arizona 86301

Valley Academy for Career and Technology Education

3405 E. State Route 89A, Building B
Cottonwood, Arizona 86326

West-MEC

1617 W. Williams Dr.
Phoenix, Arizona 85027

The following location for the Prison Entrepreneurship Program that Yavapai College offers:

Arizona State Prison Complex - Yuma

7125 E. Cesar Chavez Blvd.
San Luis, Arizona 95349

Affiliation and Accreditation



Yavapai College is accredited by the Higher Learning Commission (HLC)
230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411

Phone: 800.621.7440 / 312.263.0456 | Fax: 312.263.7462

Email: info@hlcommission.org

<http://hlcommission.org>

Equal Opportunity Statement

Yavapai College does not discriminate in admission or access to, or treatment of, or employment in, its services, programs, or activities on the basis of race, color, religion, sex, national origin, age (40 or older), veteran status, disability or genetic information or any other legally protected status in compliance with the laws of the United States and the State of Arizona. Inquiries regarding the College's equal opportunity employment practices should be directed to the Yavapai College Human Resources Office at (928) 776-2344 or janet.nix@yc.edu. Student inquiries regarding the educational programs and activities of the College should be directed to the Yavapai College Community Standards & Title IX Office at (928) 776-2211 or monica.belknap@yc.edu.

Notice of Nondiscrimination

Yavapai College prohibits sex discrimination in any education program or activity that it operates. Individuals may report concerns or questions to the Title IX Coordinator. The notice of nondiscrimination and information about reporting can be found at www.yc.edu/T9

Welcome from the President



It is my distinct honor to welcome you to Yavapai College! YC is a student-focused college that seeks to engage you in a quality learning experience.

Whether you are attending college for the first time, returning to college, preparing to enter the job market, transferring to a four-year college, upgrading workforce skills or just taking a course for pleasure, YC is here to help you successfully complete your goals.

Our nationally recognized education and training programs are offered at convenient times, in-person and online. With six campus locations across Yavapai County, opportunity is within your reach.

You may know that Yavapai College became the first rural community college in Arizona to offer baccalaureate degrees along with our short-term credentials, certificates and associate degree programs. You now can achieve your bachelor's degree at significantly reduced costs and stay close to home. It is our hope that you will receive your degree and stay in our wonderful community working and living in support of our local economy.

In making the decision to attend Yavapai College, you are on the right track to creating a better life. Here, you will find great opportunities for learning, growth and development in a welcoming, inclusive, purposeful community. What may not be apparent from the catalog is the most distinctive characteristic of YC: A community of supportive, dedicated faculty, staff and administrators who care about your education, share your aspirations and want nothing more than to see you succeed.

We've adopted a slogan that is really an aspirational statement: "Be More...". We want you to leave Yavapai College better off than when you came to us. You can 'be more' and we would be honored to help you achieve your dreams and become part of your personal story.

Again, welcome to Yavapai College.

Lisa B. Rhine, Ph.D.
President, Yavapai College

About YC

College Mission, Values, and Strategic Goals & Initiatives

Mission: Yavapai College transforms lives and strengthens the local economy through education.

Vision: Yavapai College ensures that Yavapai County is a premier place to learn, work, and live.

Values:

- **Excellence** We foster positive relationships and accountability, anticipate and address stakeholders' needs, and create a supportive learning environment.
- **Innovation** We encourage creativity, critical thinking, and the pursuit of new ideas and solutions.
- **Continuous Learning** We promote continuous learning and intellectual curiosity through formal education and beyond.
- **Belonging** We treat others with dignity and consideration, fostering a supportive and collegial environment.
- Strategic Goals & Initiatives

Goals:

- **Belonging** To building a supportive and inclusive environment that prioritizes the well-being and success of every community member.
- **Living Wage** To give students and the workforce the education and training necessary to secure living-wage jobs in a rapidly evolving economic landscape.
- **Adult Learners** To expand access to higher education and lifelong learning opportunities for a diverse group of learners, with a particular focus on those who may have previously faced barriers to educational attainment.
- **Delivery Goal** To provide students with high-quality educational programs delivered in a manner that supports their success and promotes equitable access to higher education.

View details about specific initiatives and objectives at [Yavapai College Strategic Planning](#).

District Governing Board

Board Members

- **Ms. Deb McCasland**, Board Chair
- **Mr. Steve Bracety**, Board Secretary
- **Mr. William Kiel**, Board Member
- **Mr. Alton "Toby" Payne**, Board Member
- **Mr. Patrick Kuykendall**, Board Member

The District Governing Board sets the strategic direction of the College through its board policies, priorities, and executive limitations of the president.

Visit the Yavapai College District Governing Board's home page at www.yc.edu/dgb.

College Administration

President

Lisa Rhine, Ph.D. College President (2019)

Executive Leadership Team

Douglas Berry, P.h.D. Provost (2023)

Marylou Mercado, Ed.D. Vice President of Workforce Development & Health Sciences (2018)

Rodney Jenkins, M.B.A. Vice President of Community Relations and Student Development (2017)

Clint Ewell, Ed.D. Vice President of Finance & Administrative Services (2010)

Janet Nix, Ed.D. Chief Human Resources Officer (2023)

Associate Vice Presidents

Diana Dowling, M.Ed. Associate Vice President of Enrollment Management (2011)

Dean Holbrook, M.A. Associate Vice President of Instruction & Early College (2009)

John Morgan, M.A. Associate Vice President of the School of Career & Technical Education (1999)

Tyler Rumsey M.S. Associate Vice President of Community Relations (2018)

Tania Sheldahl, M.Ed. Associate Vice President of Student Affairs and Dean of Students (1986)

District Deans

Perry Baker, Ph.D. Dean of Math, Sciences, Business, & Technology (2023)

Jason Ebersole, M.S. Dean of Health Sciences (2009)

Stacey Hilton, M.S. Dean of Instructional Support (2000)

Irina Del Genio, Ph.D. Dean of English, Humanities & Social Sciences, and the Verde Valley Campus and Sedona Center (2023)

Bryan Robertson, M.F.A. Dean of Visual and Performing Arts (2019)

Yavapai College Foundation

Executive Members: FY24/25

- **April Rhodes**, President
- **Tracey McCollum**, Vice President
- **Deanna Tarrant**, Treasurer
- **Dr. Lisa Rhine**, Yavapai College President
- **Nicole Kennedy** Yavapai College Foundation Chief Development Officer

Ensuring Excellence in Education and Empowering Our Communities: A Legacy of Support at Yavapai College

Since 1971, the Yavapai College Foundation (YCF) has been a cornerstone of excellence in education, enhancing the lives of Yavapai College students, faculty, and the surrounding communities. The Foundation's impact is made possible by the generous support of alumni and other champions in the community who provide critical resources through scholarships, auxiliary organizations, and community projects.

As both Yavapai County and Yavapai College continue to grow and evolve, the need for a strong, financially supported Foundation has never been greater. By supporting Yavapai College, you are directly investing in students who will go on to become invaluable assets to our community. Our students pursue careers in vital fields such as healthcare, public safety, technology and computer science, skilled trades, and more. Your contributions help them gain the education and skills necessary to drive the growth and prosperity of our community.

Here's how you can make a difference:

- **Make a Gift Today:** Every contribution ensures that students and faculty have the resources they need to succeed and thrive.
- **Designate Your Gift:** Direct your donation to a specific priority or project, such as healthcare programs, public safety training, or technology initiatives, that aligns with your values and vision.
- **Include YCF in Your Legacy:** Name the Yavapai College Foundation in your will or planned gift, leaving a lasting impact on generations of students.

Scholarships: Fueling Dreams, Building Futures

Thanks to the generosity of our community, the Yavapai College Foundation administers a range of scholarship funds that help hundreds of students each year. In the 2024-2025 academic year alone, more than \$1 million will be provided in scholarships and program support. This financial assistance ensures that students can pursue careers in fields that are essential to our community's future.

Together, we can continue building a brighter future for Yavapai County, where students graduate ready to take on tomorrow's challenges and contribute to the strength of our community. Join us in supporting education, shaping futures, and empowering our community. Your gift today has the power to create lasting change for generations to come.

Join and donate to YCF @ www.yc.edu/foundation.

Program Accreditation

Nursing Program

Yavapai College first received accreditation from the Accreditation Commission for Education in Nursing in 1981.

Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE, Suite 1400

Atlanta, Georgia 30326

404.975.5000

Fire Science Program

Yavapai College first received accreditation from the International Fire Service Accreditation Congress in 2001.

International Fire Service Accreditation Congress (IFSAC)

1700 E. Tyler

Oklahoma State university

Stillwater, OK 74078-8075

Phone: 405.744.8303 | Fax: 405.744.8802

Radiologic Technology Program

Yavapai College first received accreditation from the Joint Review Committee on Education in Radiologic Technology in 2011.

Joint Review Committee on Education in Radiologic Technology (JRCERT)

20 N. Wacker Drive, Suite 2850

Chicago, IL 60606-3182

312.704.5300

www.jrcert.org

Emergency Medical Technician Program

Yavapai College first received accreditation from the Committee on Accreditation of Educational Programs for Emergency Medical Services Professions in 2012.

CAAHEP - Commission on Accreditation of Allied Health Education Programs

1361 Park Street

Clearwater, FL 33756

Phone: 727.210.2350 | Fax: 727.210.2354

www.caahep.org

CoAEMSP - Committee on Accreditation of Educational Programs for Emergency Medical Services Professions

8301 Lakeview Parkway

Suite 111-312

Rowlett, TX 75088

Phone: 214.703.8445 | Fax: 214.703.8992

<http://coaemsp.org>

Automotive Program

Yavapai College received accreditation Automotive Service Excellence Education Foundation (ASE) in 2021.

ASE Automotive Service Excellence
1503 Edwards Ferry Rd., NE
Leesburg, VA 20176
703.669.6650
info@aseeducationfoundation.org

RN-BSN Program

Effective November 16, 2023, this nursing program is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing. This candidacy status expires on November 16, 2025.

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326
404.975.5000
<http://www.acenursing.org>

Note: Upon granting of initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the Board of Commissioners granting initial accreditation.

Academic Calendar

Fall Semester 2025: August 18 - December 12

Convocation	August 11
Faculty Activities Week	August 11-15
Fall Semester Begins (16-week and first 8-week session)	August 18
Labor Day Holiday (no classes, offices closed)	September 1
First 8-week Session Ends	October 9
Second 8-week Session Begins	October 15
Veterans Day (no classes, offices closed)	November 11
Thanksgiving Holiday (no classes, offices closed)	November 26-28
Fall Semester Ends (16-week and second 8-week session)	December 12
Final Grades Due to Registrar	December 17
Offices Closed - Winter Break	Dec 22-Jan 2

Spring Semester 2026: January 20 - May 15

Faculty Activities Week	January 12-16
All College Spring Welcome	January 14
Martin Luther King Jr. Holiday (no classes, offices closed)	January 19
Spring Semester Begins (16-week and first 8-week session)	January 20
First 8-week Session Ends	March 13
Spring Break (no classes, offices closed)	March 16-20
Second 8-week Session Begins	March 23
Prescott Graduation	May 2
Verde Valley Graduation	May 3
Spring Semester Ends (16-week and second 8-week session)	May 15
Final Grades Due to Registrar	May 20
Memorial Day Holiday	May 25

Summer Session 2026: June 1 - July 23

Summer Semester begins	June 1
Juneteenth Holiday (no classes, offices closed)	June 18
Independence Day Observed (no classes, offices closed)	July 6
Summer Semester Ends	July 23
Final Grades Due to Registrar	July 29

Academic Information

Academic Honors List

An honor bestowed upon students who demonstrate exemplary performance. To be eligible, a student must complete 12 or more credits in that semester with a grade point average of 3.5 or higher.

Articulation Agreements

Articulation and transfer agreements specify which courses are equivalents from, or to, another institution. Your advisor will be able to tell you if such an agreement exists, and for which specific courses. Related information is available at University Transfer Information/Resources found at www.yc.edu/advising.

Assessment of Student Academic Achievement

In harmony with Yavapai College's mission to provide quality higher learning, the assessment cycle of continuous improvement based on evidence ensures the quality of students' academic experiences. The purpose of assessment is to measure the degree to which students attain the educational goals and outcomes determined by the academic departments of the college. The assessment process consists of identifying goals and outcomes, gathering evidence about how well students are attaining the goals and outcomes, and using the information to improve instruction and revise curriculum.

Educational Partnerships

Yavapai College has partnerships with the three Arizona state public universities (Arizona State University, Northern Arizona University, and the University of Arizona), as well as transfer agreements with other U.S. universities and colleges that are regionally accredited. Transfer partnerships assist students in making a smooth transition from one institution to the next by maximizing credits. Several university partners offer Yavapai College graduates dedicated advisement as well as financial incentives such as tuition and transfer scholarships, waiver of application fees, textbook waivers, and special tuition incentives. To view a list of institutions with which Yavapai College has established articulation agreements, and to view a schedule of university visits to YC campuses, see www.yc.edu/transfer.

Leighnor Aircraft, LLC

Yavapai College and Leighnor Aircraft have established by contract the leasing of fixed-wing aircraft and the use of flight schedule software for Yavapai College's AAS in Aerospace Science/Airplane Operations program.

Internships

Internships and other work-based learning (WBL) opportunities develop student competencies beyond the classroom while preparing participants for skilled entry into specific industry sectors. These experiences enable students to explore potential careers and apply knowledge gained in the classroom while refining technical skills and gaining relevant experience in the workplace.

Credit-bearing internships, practicums, clinicals, and apprenticeships are available at Yavapai College as an option for certain programs. To explore these possibilities, students should see their Academic Advisor or the program's Internship/Practicum Coordinator.

Methods of Instruction and Meeting Types

Yavapai College offers a variety of instructional methods to meet the needs of a diverse student population.

Instructional Delivery Methods

Delivery Type	Description
Activity Based	Classes are based on physical activity and students are expected to attend all classes.
Apprenticeship	On-the-job training utilizing structured field experiences within specific trades or professions. These experiences enable students to explore potential careers and apply knowledge gained in the classroom while refining their technical skills and gaining relevant experience in the workplace.
Classroom Based	Classes are held in a classroom at specific days and times.
Classroom and Web (Hybrid)	A hybrid class combines face-to-face classroom instruction with online course activities. This blended learning model offers students the opportunity to engage with instructors in the classroom on a regular and scheduled basis. The hybrid model supplements class time with online lessons and activities. Although the balance of in-class and online learning time differs from class to class, the hybrid model offers students the best of both worlds. Students benefit from in-class interaction with their instructor while also having the flexibility of online learning activities that can be accessed on their personal schedules.
Competency-Based Education	Students register for course work as usual, but proceed at their own pace; the time to complete an assignment may be accelerated or decelerated. Students receive credit for the course when they have demonstrated mastery of the competencies by passing a summative assessment. Students may take assessments at any time (with agreement of instructors).
Computer Based In-Classroom	Classes meet in a classroom at specific days and times. Students are required to use a computer in the classroom.
Directed Research	Faculty or mentor directed student research in an area of current scientific investigation. Lab or fieldwork with the object of contributing to the professional body of scientific knowledge. Includes data collection, analysis and written and oral presentation.
Independent Study	Supervised special project which is undertaken with the direction of an assigned faculty member. Certain requirements must be met. Consult with an academic advisor for more information.
Individually Paced Instruction (IPI)	Instructors help students work at their own pace to complete requirements. Students must show weekly progress.
Internship	Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. Consult with an academic advisor for more information.
Online	An online class is completely virtual. Course content is delivered asynchronously, so students can learn on their own time. Course content, assignments and test deadlines may be scheduled on a weekly basis, so students will need to consistently log into online courses to adhere to instructor

	deadlines. Online classes offer students the benefit of twenty-four hours, seven days a week accessibility to fit their life and work schedules. Instructors in online classes provide regular interaction and support through email, discussion forums, and assignment feedback. Some online classes may require proctored exams. Additional fees may be charged for proctored exams.
Open Entry/Closed Exit	Proficiency-based instruction where students work at their own pace in an open lab setting. Students may register at various times and must complete classes by an established deadline. Delivery types may vary.
Practicum	In a practicum, a student integrates coursework with supervised practical application of a previously or concurrently studied theory.
Private Lesson	Private lessons are scheduled for each student. One instructor is assigned to each student.
Video Conferencing	Video Conferencing classes are held in physical locations, but students can also choose to connect with the class using an online program called Zoom. Zoom allows students to interact with the instructor and other students in the class. If using Zoom, students will need a computer with reliable Internet access, web camera and a microphone.
WebLIVE	WebLive is a live online class where students and instructors are connected in a virtual classroom via Zoom. This hybrid model supplements class time with online lessons and activities. Just like an in-person class, a WebLive class takes place in real time, meeting at the same time each week. Although the balance of virtual and online learning time differs from class to class, the hybrid model offers students the best of both worlds. This allows students and instructors to be online at the same time engaging in classroom lectures, discussions, and real time activities. The high-quality and real-time interaction of WebLive courses requires that students have reliable Internet access, a web camera, and a microphone.

Meeting Types

Meeting Type indicates the primary way(s) a student will interact with the class (in person in a classroom, online, a combination of both, etc.). A course may include one or more of the following meeting types.

Meeting Type	Description
Class	Classes are held in a classroom at specific days and times.
Field Trip	A field trip is a visit or journey by students to a specified location to gain firsthand knowledge outside of the classroom. This provides a complementary and diverse learning environment.
Individually Paced Instruction (IPI)	Classes are taught in a variety of settings with faculty guidance, and in which students work at their own pace to complete course requirements. Students are expected to exhibit weekly progress and to follow the start/end dates specified on the class schedule.
Mandatory Orientation	A mandatory orientation is required. The course schedule will specify whether a mandatory orientation is in person or can be provided online via a program called Zoom.
Open Entry/Closed Exit	Proficiency-based instruction where students work at their own pace in an open lab setting. Students may register at various times and must complete classes by an established deadline. Delivery types may vary.
Online	An online class is completely virtual. Course content is delivered asynchronously, so students can learn on their own time. Course content, assignments and test deadlines may be scheduled on a weekly basis, so students will need to consistently log into online courses to adhere to instructor deadlines. Online classes offer students the benefit of twenty-four hours, seven days a week accessibility to fit their life and work schedules. Instructors in online classes provide regular interaction and support through email, discussion forums, and assignment feedback. Some online classes may require proctored exams. Additional fees may be charged for proctored exams.
Optional Orientation	An optional orientation is not required, but attendance is strongly encouraged. The course schedule will specify whether an optional orientation is in person or can be provided online via a program called Zoom.
WebLIVE	WebLive is a live online class where students and instructors are connected in a virtual classroom via Zoom. This hybrid model supplements class time with online lessons and activities. Just like an in-person class, a WebLive class takes place in real time, meeting at the same time each week. Although the balance of virtual and online learning time differs from class to class, the hybrid model offers students the best of both worlds. This allows students and instructors to be online at the same time engaging in classroom lectures, discussions, and real time activities. The high-quality and real-time interaction of WebLive courses requires that students have reliable Internet access, a web camera, and a microphone.

Prior Learning Assessment & Credit for Exams

Prior Learning Assessment

Yavapai College recognizes that learning experiences take place in a variety of settings. Many students have significant, demonstrable learning that has come from educational experiences outside the traditional academic environment. Students may be awarded college credit for prior or extra-institutional learning based on established assessment methods including articulation agreements, credit by evaluation, and college-level equivalency examinations. All assessment methods used by the College require faculty review and oversight to determine that learning outcomes have been accomplished by determining acceptable test scores, appropriate equivalencies, special program requirements, or other academic considerations.

Additional Information:

- A maximum of 30 credit hours of prior learning will be accepted toward an Associate degree; a maximum of 45 credit hours of prior learning will be accepted toward a Bachelor of Applied Science degree; a maximum of 60 credit hours of prior learning will be accepted toward a Bachelor degree.
- Duplicate credit will not be awarded for prior learning in subject matter for which the student has already received credit.
- Assessment for prior learning will not be administered for equivalent courses numbered below 100.
- Credit will not be granted for more elementary course work or for a prerequisite to a course in which the student is enrolled or for which the student has already received credit.
- An official transcript, documentation of test scores or agency certification must be sent directly to the Registrar for assessment of equivalent credit.
- The Yavapai College transcript will document only that credit for prior learning has been granted and the number of credits awarded. No letter grade will be assigned for any assessment of prior learning and no record will be made of unsuccessful assessments.
- Prior learning credit earned at Yavapai College is not necessarily transferable to other colleges and universities. Students are strongly advised to meet with a program advisor at the college or university they plan to attend.
- Credit for prior learning may impact financial aid awards. Students are strongly advised to meet with a financial aid advisor prior to pursuing assessment of prior learning.
- The student must pay any fees and adhere to approved administrative procedures for the prior learning assessment method selected. All fees are non-refundable.

Agency or Industry Certifications or Licenses

If you have any type of agency or industry certification, speak to your academic advisor to request a review of your certifications or licenses for possible earned college credit.

Examples include: CPR certification, Certified Nursing Assistant (CNA), A+ Computer Certification, ASE Certifications, FAA Certifications. See full list of equivalencies at <https://www.yc.edu/v6/registrar/cpl/index.html>

Military Training and Experience:

ACE Military Registry Transcripts including AARTS (Army); SMART (Navy and Marine Corp); CCAF (Air Force and Space Force); and CARTS (Coast Guard) can be considered. The student must request that the transcript be sent to the YC Registrar's Office or electronically to: electronicreceipts@yc.edu. For more information: consult <http://aarts.army.mil/> (check the information on "Related Links/Referrals" for other military branches of service).

- Credit awarded is not necessarily transferable to other institutions and may impact financial aid awards. Students should meet with a financial aid advisor prior to pursuing assessment of military training.

Advanced Placement (AP) Table*

Students who have taken a college board advanced placement course in their secondary school may be eligible to receive YC credit. Listed are the AP subject areas accepted by Yavapai College, the score required, the credit awarded and the recommended YC equivalent. Students should have their scores sent directly to the YC Registrar's office.

Exam	Score	Credits	YC Equivalent
2-D Art & Design	4/5	3	ART 112
3-D Art & Design	4/5	3	ART 113
Art History	3 4/5	3 6	ART 200 or ART 201 ART 200 & ART 201
Biology	3 4/5	4 8	BIO 100 BIO 181 & BIO 182
Calculus AB	3/4/5	5	MAT 220
Calculus BC	3 4/5	5 10	MAT 220 MAT 220 & MAT 230
Chemistry	4 5	4 8	CHM 151 CHM 151 & CHM 152
Comparative Government & Politics	4/5	3	Elective Credit
Computer Science A	4/5	3	CSC 105
Computer Science Principles	3/4/5	3	CSC 105
Drawing	4/5	3	ART 110
English Language & Composition	4/5	3	ENG 101 or Dept Elective
English Literature & Composition	4/5	3	ENG 101 or Dept Elective
Environmental Science	4/5	4	BIO 105
European History	4/5	6	Dept Elective
Human Geography	4/5	3	GEO 105
Macroeconomics	4/5	3	ECN 235
Microeconomics	4/5	3	ECN 236
Music Theory	4/5	4	MUS 131
Physics 1	4/5	4	PHY 111
Physics 2	4/5	4	PHY 112
Physics C (Elect. & Magnetism)	3/4/5	4	PHY 112
Physics C (Mechanics)	3/4/5	4	PHY 111
Precalculus	3/4/5	5	MAT 182 & MAT 183
Psychology	4/5	3	PSY 101
Research	3/4/5	3	Elective Credit
Seminar	3/4/5	3	Elective Credit

Spanish Language	3/4/5	16	SPA 101, SPA 102, SPA 201 & SPA 202
Spanish Literature & Culture	3/4/5	16	SPA 101, SPA 102, SPA 201 & SPA 202
Statistics	3/4/5	3	MAT 167
US History	4/5	6	HIS 131 & HIS 132
World History	4/5	3	HIS 105

Cambridge Assessment International Education (formerly CIE) Table

Listed are the Cambridge International AS & A levels accepted by Yavapai College, the score required, the credit awarded and the recommended YC equivalent. Students should have their scores sent directly to the YC Registrar's office.

Exam	Score	Credits	YC Equivalent
Accounting-AS Level	a - e	3	Elective Credit
Accounting-A Level	A* - E	6	Elective Credit
Biology-AS Level	a - d e	4 4	BIO 100 or Dept Elective BIO 100
Biology-A Level	A* - D E	8 4	BIO 181 & BIO 182 BIO 181
Business-AS Level	a - e	3	Elective Credit
Business-A Level	A* - E	6	Elective Credit
Chemistry-AS Level	a - d	4	CHM 130
Chemistry-A Level	A or A* B or C D or E	8 4 4	CHM 151 & CHM 152 CHM 151 CHM 130
Computer Science-AS Level	a - e	3	Elective Credit
Computer Science-A Level	A* - E	3	Elective Credit
Economics-A Level	A* - D	6	ECN 235 & ECN 236
English Language-A Level	A* - E	3	Elective Credit
English Literature-A Level	A* - E	3	Elective Credit
Geography-AS Level	a - c	3	Elective Credit
Geography-A Level	A* - C	6	Elective Credit

Global Perspectives & Research-AS Level	a - e	3	Elective Credit
Global Perspectives & Research-A Level	A* - E	6	Elective Credit
History-AS Level	a - e	3	HIS Dept Elective
History-A Level	A* - E	6	HIS Dept Elective
Information Technology-AS Level	a - e	3	Elective Credit
Information Technology-A Level	A* - E	3	Elective Credit
Marine Science-A Level	A* - D	4	BIO Dept Elective
Mathematics-AS Level	a - e	3	MAT 152 or MAT 182
Mathematics-A Level	A* - E	8	MAT 182 & MAT 183 & MAT 212
Mathematics-Further-A Level	A* - E	13	MAT 220 & MAT 230 & MAT 167
Music-AS Level	a - e	3	MUS 240
Music-A Level	A* - E	3	MUS 240
Psychology-A Level	A* - E	6	PSY 101 & PSY Elective
Psychology-AS Level	a - e	3	PSY 101

College Level Equivalency Exams

College Level Examination Program examinations (CLEP) are administered by the Assessment and Testing Center. For information about the specific examinations administered and accepted by Yavapai College and fees involved, call 928.776.2200. For CLEP course titles and outlines of each course, go to <http://www.collegeboard.com/student/testing/clep/about.html>.

College Level Examination Program (CLEP) Table

Students may earn credit by successfully completing CLEP examinations. Listed are the CLEP subject areas accepted by Yavapai College, the credit awarded and the recommended Yavapai College equivalent. Only CLEP scores of 50 or better will be awarded credit (scoring exceptions are listed in the lower table). CLEP scores are not transferred to Yavapai College from another school's transcript. CLEP scores must be sent directly to the YC Registrar's Office.

Name of Exam	Credits	YC Equivalent
Business		
Information Systems	3	CSA 110
Introductory Business Law	3	Elective Credit
Financial Accounting	3	ACC 131
Principles of Macroeconomics	3	ECN 235
Principles of Microeconomics	3	ECN 236
Principles of Marketing	3	MKT 240
Composition & Literature		
Analyzing & Interpreting Literature	3	Elective Credit

College Composition	3	ENG 101 or Elective Credit
Education & Behavioral and Social Sciences		
Human Growth & Development	3	PSY 245
Introduction to Educational Psychology	3	EDU Dept Elective
Introductory Psychology	3	PSY 101
Introductory Sociology	3	SOC 101
Science & Mathematics		
Biology	3	BIO Dept Elective
Chemistry	4	CHM 151
College Algebra	3	MAT 152 or MAT 182
Pre-Calculus	5	MAT 182 & MAT 183
Calculus	5	MAT 220
Spanish Language		
Score of 50	4	SPA 101
Score of 55	8	SPA 101 & SPA 102
Score of 66	12	SPA 101 & SPA 102 & SPA 201
Score of 68 or higher	16	SPA 101 & SPA 102 & SPA 201 & SPA 202

Listed below are the College Level Examination Program (CLEP) subjects with scoring exceptions:

American Literature or English Literature		
Score of 55	3	Elective Credit
History of the U.S. I		
Score of 56	3	HIS 131
History of the U.S. II		
Score of 56	3	HIS 132
Natural Sciences		
Score of 53	3	Elective Credit
Score of 56	6	Elective Credit
Social Sciences & History		
Score of 56	6	Elective Credit
Spanish Language with Writing		
Score of 55	8	SPA 101 & SPA 102
Score of 60 or higher	16	SPA 101, SPA 102, SPA 201 & SPA 202
Western Civilization I		
Score of 56	3	HIS Dept Elective
Western Civilization II		
Score of 56	3	HIS Dept Elective

DSST (formerly DANTES) Exam Table

DSST (formerly DANTES Subject Standardized Tests) are credit-by-examination tests originated by the United States Department of Defense's Defense Activity for Non-Traditional Education Support (DANTES) program. Listed are the DSST subject areas accepted by Yavapai College, the score required, the credit awarded and the recommended YC equivalent. Students should have their scores sent directly to the YC Registrar's office.

Exam	Minimum Score	Credits	YC Equivalent
Computing and Information Technology	400	3	Elective Credit
Criminal Justice	400	3	AJS 101
Environmental Science	400	4	BIO 105
Fundamentals of Cybersecurity	400	3	Elective Credit
Introduction to Business	400	3	Elective Credit
Introduction to Geography	400	3	GEO 105
Introduction to Law Enforcement	400	3	AJS 230
Lifespan Developmental Psychology	400	3	PSY 245
Organizational Behavior	400	3	Elective Credit
Principles of Finance	400	3	Elective Credit
Substance Abuse	400	3	PSY 241
Technical Writing	400	3	Elective Credit

International Baccalaureate (IB) Table

The International Baccalaureate (IB) Diploma Programme, offered in select high schools, is a rigorous 2-year course of precollege studies leading to exams that can be used to qualify for college credit. Listed are the IB subject areas accepted by Yavapai College, the score required, the credit awarded and the recommended YC equivalent. Students should have their scores sent directly to the YC Registrar's office.

Exam	Score	Credits	YC Equivalent
Biology- HL	4 5 or higher	4 8	BIO 100 BIO 181 & BIO 182
Biology - SL	4 5 or higher	3 4	BIO Dept Elective BIO 100
Business & Management - HL	5 or higher	3	Elective Credit
Business & Management- SL	5 or higher	3	Elective Credit
Chemistry - HL	4 5 or higher	4 8	CHM 151 CHM 151 & CHM 152
Computer Science - HL	5 or higher	3	CSC 105

Computer Science - SL	5 or higher	3	Elective Credit
Economics - HL	5 or higher	6	ECN 235 & ECN 236
Environmental Systems & Societies	5 or higher	3	Elective Credit
Geography - HL	5 or higher	3	GEO 105
Geography - SL	4 or higher	3	GEO Dept Elective
History, Americas - HL	4	3	HIS 131
	5 or higher	6	HIS 131 & HIS 132
History, Europe - HL	4	3	HIS Dept Elective
	5 or higher	6	HIS Dept Elective
Information Technology in a Global Society - HL	5 or higher	3	Elective Credit
Information Technology in a Global Society - SL	5 or higher	3	Elective Credit
Language A:Literature- HL	5 or higher	3	ENG 101
Language A: Language & Literature - HL	5 or higher	3	ENG 101 or Elective Credit
Mathematics - HL	5 or higher	5	MAT 220
Mathematics: Analysis & Approaches - HL	5 or higher	5	MAT 220
Mathematics: Analysis & Approaches - SL	5 or higher	3	MAT 142
Mathematics: Applications & Interpretations - HL	5 or higher	3	MAT 142
Music - HL	4 or higher	3	MUS 240
Music - SL	5 or higher	3	MUS 240
Physics - HL	5	4	PHY 111
	6 or higher	8	PHY 111 & PHY 112
Physics - SL	6 or higher	4	PHY 111
Psychology - HL	5 or higher	3	PSY 101
Social & Cultural Anthropology - HL	4 or higher	3	ANT 102
Social & Cultural Anthropology - SL	5 or higher	3	ANT Dept Elective
Spanish B - HL	4	4	SPA 101
Spanish B - HL	5	8	SPA 101 & SPA 102
Spanish B - HL	6	12	SPA 101 & SPA 102 & SPA 201
Spanish B - HL	7	16	SPA 101 & SPA 102 & SPA 201 & SPA 202

Sports, Exercise & Health Science - HL	4 or higher	3	EXW 152
Sports, Exercise & Health Science - SL	5 or higher	3	EXW 152
Visual Arts - HL	4 5 or higher	3 6	ART 112 ART 110 & ART 112
World Religions - SL	5 or higher	3	Elective Credit

State Authorization

The U.S. Department of Education requires institutions that offer distance education in a state where it is not physically located meet individual state requirements. The State Authorization Reciprocity Agreement (SARA) is an agreement among member states, districts and territories that establishes comparable national standards for interstate offering of postsecondary distance education courses and programs. Arizona was approved as a State Authorization Reciprocity Agreement (SARA) state effective November 11, 2014. Yavapai College was approved as an Arizona member institution in October 2015.

Distance Education students outside of Arizona, after completion of the institution's internal complaint process, may appeal SARA related complaints to the Arizona Community College Coordinating Council (AC4).

The Arizona SARA Council has jurisdiction over Arizona SARA approved institutions regarding non-instructional complaints for distance education students. Upon completion of the institution's and AC4's complaint process, a student may register a complaint with the Arizona SARA Council. Visit the AZ SARA Complaint Process website for more information. For students who are residents of states outside of Arizona, consumer inquiries also may be directed to the following Consumer Protection Agency of the state in which they reside.

Professional Licensure

Yavapai College provides public and direct professional licensure disclosures in accordance with federal requirements and as a State Authorization Reciprocity Agreement participating institution. Academic programs that reasonably assumed to lead to professional licensure or certification are responsible for determining whether their academic programs meet applicable state education requirements for professional licensure or certification where their students are located. The Professional Licensure by State table identifies whether professional licensure:

- Meets applicable professional licensure requirements;
- Does not meet applicable professional licensure requirements; or

Please see the Notice to Students Regarding Professional Licensure and Certification for more information on the General Disclosure Statement (34 CFR 668.43).

View more information on State Authorization at www.yc.edu/stateauthorization.

SUN (Shared Unique Number) System

The Shared Unique Number (SUN) System is a college course numbering system designed to help Arizona students plan their education and ensure successful transfer of course credits. The SUN System includes major courses having direct equivalencies at all three Arizona universities and the community college districts which offer them.

- SUN courses are identified by a three-letter prefix, four-digit course number, and a SUN icon . These courses are labeled in university and community college catalogs, schedules, and websites, making it easy and immediate for students to find transferable courses.
- SUN courses are a subset of the tens of thousands of college courses that transfer among Arizona's colleges and universities. These courses and their equivalencies can be found in the searchable Course Equivalency Guide on AZTransfer.com.

Because each student has a unique academic plan, they are encouraged to consult with an academic advisor prior to enrollment. For more information about SUN, including a list of SUN courses, visit www.aztransfer.com/sun.

Admission, Registration & Records

Admission

Yavapai College invites qualified individuals who demonstrate evidence of potential success as adult learners in an institution of post-secondary higher education to seek admission.

In accordance with Arizona state law, Revised Statutes 15-1805.01 and 15-1821, Yavapai College may admit:

A. A person who satisfies any one of the following criteria:

1. Is a graduate of a high school that is accredited by a regional accrediting association as defined by the United States Office of Education or approved by a state board of education or other appropriate state educational agency. Yavapai College has procedures to evaluate the validity of a student's high school completion if the institution or the Secretary has reason to believe that the high school diploma is not valid or was not obtained from an entity that provides secondary school education. These procedures include an official high school transcript with the graduation date included, that is sent directly from the high school to the Registrar's Office.
2. Has a high school certificate of equivalency.
3. Is at least eighteen years of age and demonstrates evidence of potential success in the community college.
4. Is a student transferring from another regionally accredited college or university in good standing (2.0 cumulative GPA).

B. A person who is under 18 years of age and has not satisfied the requirements above may be admitted upon completion of course pre-requisites and achievement of one of the following:

1. A composite score of 93 or more on the preliminary Scholastic Aptitude Test (PSAT).
2. A composite score of 930 or more on the Scholastic Aptitude Test (SAT).
3. A composite score of 22 or more on the American College Test (ACT).
4. A passing score on the relevant portions of the current state test(s) required for Arizona standards measurement or graduation (AIMS or replacement).
5. The completion of a college placement test designated by the College district that indicates the student is at the appropriate college level for the course.
 - a. *A person under 18 who wishes to enroll in a course for which there is no prerequisite nor applicable placement test may be admitted on an individual basis with the approval of college officials.*

C. Homeschooled students are exempt from subsection B of this policy.

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

- Yavapai College reserves the right to restrict enrollment.
- Admission to Yavapai College does not guarantee admission to specific programs.
- Specialized application materials may be required for certain programs, from non-citizens of the United States, from students appealing a residency classification, and in related circumstances.
- Yavapai College may admit students according to intergovernmental agreement, contract, program participation, or College-approved instruction.

Residency Determination

Classification of state residency for tuition purposes at Yavapai College is governed by state law. The information below establishes the criteria for Arizona residency. Students who are classified as non-residents will be assessed out-of-state fees when registering for classes.

Definition of Terms

1. "Armed Forces of the United States" means the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the Space Force, the commissioned corps of the United States Public Health Service and the National Oceanographic and Atmospheric Association.
2. "Continuous attendance" means enrollment at an educational institution in this state as a full-time student, as such term is defined by the governing body of the educational institution, for a normal academic year since the beginning of the period for which continuous attendance is claimed. Such person need not attend summer sessions in order to maintain continuous attendance.
3. "Domicile" means a person's true, fixed and permanent home and place of habitation. It is the place where he/she intends to remain and to which he/she expects to return when he/she leaves without intending to establish a new domicile elsewhere.
4. "Emancipated person" means a person who is neither under a legal duty of service to his parent nor entitled to the support of such parent under the laws of this state.
5. "Parent" means a person's father or mother, or custodial parent, or if there is no surviving parent or the whereabouts of the parents are unknown, then a guardian of an unemancipated person if there are not circumstances indicating that such guardianship was created primarily for the purpose of conferring the status of an in-state student on such unemancipated person.

In-State Student Status

- A. Except as otherwise provided in this article, no person having a domicile elsewhere than in this state is eligible for classification as an in-state student for tuition purposes.
- B. A person is not entitled to classification as an in-state student until the person is domiciled in this state for one year, except that a person whose domicile is in this state is entitled to classification as an in-state student if the person meets one of the following requirements:
 1. The person's parent's domicile is in this state and the parent is entitled to claim the person as an exemption for state and federal tax purposes.
 2. The person is an employee of an employer which transferred the person to this state for employment purposes or the person is the spouse of such employee.
 3. The person is an employee of a school district in this state and is under contract to teach on a full-time basis, or is employed as a full-time non-certified classroom aide, at a school within that school district. For purposes of this paragraph, the person is eligible for classification as an in-state student only for courses necessary to complete the requirements for certification by the state board of education to teach in a school district in this state. No member of the person's family is eligible for classification as an in-state student if the person is eligible for classification as an in-state student pursuant to this paragraph.
 4. If you are a non-citizen who attended an Arizona high school for at least two years and graduated from an Arizona high school, you may be eligible for in-state tuition. Upload a photo ID using the yellow "Secure Upload Link" at <https://www.yc.edu/v6/registrar/residency.html> and send an *official final transcript* from your Arizona high school to: Yavapai College Office of the Registrar, 1100 E. Sheldon St., Prescott, AZ 86301.
- C. The domicile of an unemancipated person is that of such person's parent.
- D. Any unemancipated person who remains in this state when such person's parent, who had been domiciled in this state, moves from this state is entitled to classification as an in-state student until attainment of the degree for which currently enrolled, so long as such person maintains continuous attendance.
- E. A person who is a member of the armed forces of the United States and who is stationed in this state pursuant to military orders or who is the spouse or a dependent child as defined in section 43-1001 of a person who is a member of the armed forces of the United States and who is stationed in this state pursuant to military orders is entitled to classification as an in-state student. The student, while in continuous attendance toward the degree for which currently enrolled, does not lose in-state student classification.

- F. A person who is a member of the armed forces of the United States stationed in this state pursuant to military orders or the spouse or a dependent as defined in section 43-1001 of a member of the armed forces of the United States is entitled to classification as an in-state student if the member of the armed forces has claimed this state as the person's state of legal residence for at least twelve consecutive months before the member of the armed forces, spouse or dependent enrolls in a university under the jurisdiction of the Arizona board of regents or a community college under the jurisdiction of a community college district governing board. For purposes of this subsection, the requirement that a person be domiciled in this state for one year before enrollment to qualify for in-state student classification does not apply.
- G. A person who is honorably discharged from the armed forces of the United States shall be granted immediate classification as an in-state student on honorable discharge from the armed forces and, while in continuous attendance toward the degree for which currently enrolled, does not lose in-state student classification if the person has met all of the following requirements:
1. Declared Arizona as the person's legal residence with the person's branch of service at least one year prior to discharge from the armed forces.
 2. Demonstrated objective evidence of intent to be a resident of Arizona which, for the purposes of this section, includes at least one of the following:
 - a. An Arizona driver's license
 - b. Arizona motor vehicle registration
 - c. Employment history in Arizona
 - d. Arizona voter registration
 - e. Transfer of major banking services to Arizona
 - f. Change of permanent address on all pertinent records
 - g. Other materials of whatever kind or source relevant to domicile or residency status
 - h. Filed an Arizona income tax return with the Department of Revenue during the previous tax year.
 - i. A spouse or dependent(s) of a veteran that has been discharged from a period of active duty that was 90 days or longer AND using VA education benefits under Chapter 30, Chapter 31, Chapter 33 or Chapter 35 may also qualify. Call 928.717.7613 for more information.

County Residency

Arizona residents from counties in which there is no established community college district (Apache and Greenlee) may enroll in credit classes with Yavapai College without payment of out-of-county charges, if the student presents a notarized Arizona Out-of-County Affidavit stating that the individual has resided in the county for at least 50 days prior to the 1st day of classes. The student still is responsible for payment of regular tuition and fees.

Western Undergraduate Exchange Program Reduced Tuition

Yavapai College participates in the Western Undergraduate Exchange Program (WUE), a program of the Western Interstate Commission for Higher Education (WICHE). Residents of eligible states (currently Alaska, California, Colorado, Hawaii, Idaho, Montana, North Dakota, New Mexico, Nevada, Oregon, South Dakota, Utah, Washington and Wyoming) that enroll in any of Yavapai College's WUE-eligible programs in seven (7) credit hours or more will pay a reduced out-of-state tuition. See www.yc.edu/tuition for current rates and exempt programs.

Time enrolled under WUE status does not count toward establishing Arizona residency for tuition purposes.

<http://www.yc.edu/residency>

International Students

To qualify for admission as an international student, one must:

- be a high school graduate

- demonstrate proficiency in the English language with a score of 61 on the internet-based (iBT) Test of English as a Foreign Language (TOEFL) or a score of 90 or higher on the Duolingo English test
- have U.S. health insurance coverage which includes repatriation and medical evacuation clauses
- certify that he/she has adequate financial resources to be self-supporting while attending Yavapai College

Visit www.yc.edu/is for application information.

Admitted international students are required to enroll for a full-time course load (minimum of 12 semester credits) each Fall and Spring, and are also required to meet with an academic advisor each semester.

Incoming Transfer Students

Students who have attended prior colleges should indicate this on the admission application and provide Yavapai College with an official transcript of all work completed. Transcripts will be evaluated to determine how much credit will be granted for transfer courses toward satisfying Yavapai College degree and certificate requirements.

Yavapai College accepts credits from regionally accredited institutions on a credit-unit-for-credit-unit basis (adjusted for semester/quarter terms). Course equivalencies are established based on alignment of the course description and learning outcomes. Only courses 100-level or above with a grade of "C" or better will be considered for transfer credit. Yavapai College accepts only transfer credits, no grade point averages. Credits from nationally accredited institutions will be considered on a case-by-case basis and should be brought to the attention of the Office of the Registrar.

Registration

Registering for Classes

The College regards a student's registration in classes as a commitment on his/her part to comply with all College regulations. It is the student's responsibility to read the catalog and to understand these regulations.

Students register for classes via secure log in at www.yc.edu/register. Students who do not have approved financial aid must pay all tuition/fees at the time of registration. Detailed information regarding registration (dates, tuition rates, course availability, etc.) is published online each semester.

Degree and certificate seeking students should meet with an academic advisor prior to each semester to review degree requirements, prerequisites, and course selection.

Students must maintain a current address and other personal information in myYC portal each semester. It is important to keep a current address on file and it is required for students to monitor their College-assigned email address in order to receive all official correspondence.

Yavapai College reserves the right to restrict enrollment in classes and/or programs when educational, contractual, legal, or safety obligations warrant such restrictions.

Auditing a Course

A student wishing exposure to a course may elect to audit. Regular attendance at all class meetings is the responsibility of the student, but writing assignments and examinations are not mandatory. A grade of "AU" will be awarded for satisfactory attendance. Courses audited carry no credit toward the grade point average, toward graduation, or toward meeting professional requirements. Audit units do not count toward determining the eligibility for financial aid purposes. Audits may be repeated for credit. Once a student registers for and completes a class as an auditor, the audit on the permanent record may not be changed to a credit-earning grade. Students enrolling for credit will have priority over auditors until the first class day of the course, at which time auditors may enroll on a space available basis. An additional fee is assessed to audited courses. Go to www.yc.edu/tuition for current audit fee.

Student Holds

Holds may be placed on student records for outstanding obligations to the college. A student may not be able to enroll in classes, obtain grade reports, obtain official transcripts, or receive an earned degree or certificate until holds placed on the record have been cleared. Examples of student holds are:

- Academic Notice or Academic Suspension
- Bad or returned check
- Unpaid fees such as library fines
- Disciplinary holds for student misconduct
- Financial aid or student loan holds

Students can determine the originator of the hold via secure login (username & password) at www.yc.edu; students should call the phone number listed to resolve the hold.

Changes in Registration (Add, Drop & Withdraw)

Add/Drop/Withdraw Procedures

- Students may add, drop and withdraw from classes during designated periods each term via secure log in at www.yc.edu.
- A student-initiated withdraw prior to the deadline will result in a "W" posted to the permanent record. An administrative withdraw will be noted with a "Y."
- For deadlines and effects of changes, see www.yc.edu/academiccalendar.

- It is strongly recommended that students see an academic advisor prior to a complete withdrawal from the College.

Grades and Credits

Instructors will evaluate student achievement of course learning outcomes, and students will be regularly informed of their progress. Evaluation measures will be clearly set forth by the instructor in the course syllabus. A variety of evaluation methods relevant to the learning outcomes may be used.

Grades		
Letters	Grades	Grade Points
A	Excellent	4 grade points per semester hour
B	Good	3 grade points per semester hour
C	Average	2 grade points per semester hour
S	Satisfactory	not computed in GPA (equivalent to C grade)

A course completed with a grade of A, B, C or S fulfills the prerequisite requirement for another course. A maximum of 12 credit hours of S grades may be applied to a degree or certificate program. Grades of S are not an option towards completion of an AGECE (Arizona General Education Curriculum) certificate.

D	Unsatisfactory	1 grade points per semester hour
F	Failure	0 grade points per semester hour
U	Unsatisfactory	not computed in GPA

A course completed with a grade of D, F or U does not fulfill the prerequisite requirement for another course and may not be applied to a degree or certificate requirement.

I	Incomplete	not computed in GPA
IP	In Progress	not computed in GPA
W	Withdraw	not computed in GPA
Y	Administrative Withdraw	not computed in GPA
AU	Audit (no credit)	not computed in GPA

To calculate the Grade Point Average (GPA) for the semester:

- Multiply the points assigned to the letter grade by the number of credit hours earned in each class
- Add the points of all classes together
- Divide by the total number of credits

Sample Grade Point Average (GPA) Calculation

CRS. #	Course Title	Grade Letter = (Points)	Credit Hours	Total Grade Points
ENG 101	College Comp 1	A (4)	x 3	= 12
SPA 101	Beginning Spanish1	B (3)	x 4	= 12
		7		24

Total Grade Points (24) divided by Total Credit Hours (7) = 3.4 GPA

Change of Final Grade

In case of an error in computing or recording a final grade, a student may request a grade change by faculty no later than 30 calendar days after the date the final grade has been posted to the student's permanent record. Once a grade for a course has been officially posted to the student's permanent record by the Registrar, the instructor may change the grade due to the following:

1. An error occurred in the computer and/or recording of the grade or,
2. An incomplete classification (I)

A Change of Grade request after 30 calendar days must be completed with appropriate signatures including the instructor, and Dean or designee. The request is then submitted to the Registrar.

Competency-Based Education (CBE) Grades

A competency-based education (CBE) course has a final grading option of S/U only.

- To ensure timely progress and consistent engagement in a CBE course, students must complete at least 50% of the course assignments with proficiency by the end of the semester in which a student initially enrolls for the course. Failure to meet this requirement will result in a final grade of "U" (Unsatisfactory), and the student will be required to retake the course.
- Students who have completed at least 50% of the course assignments with proficiency by the end of the semester but have not finished the entire course may continue into the following semester. However, they must complete all course assignments with proficiency not to extend beyond one semester after the semester for which the course was enrolled (a total of two consecutive semesters). Failure to do so will result in a final grade of "U" (Unsatisfactory), and the student will be required to retake the course.
- Students who complete all course assignments with proficiency within two consecutive semesters will receive a final grade of "S" (Satisfactory).

Incomplete Grades

A grade of "I" may be requested by a student and will be posted to the student's permanent record only at the end of a semester in which the student has done the following:

1. Has completed a significant majority of the work required for the course while maintaining a "C" average for work submitted and is capable of completing the remainder of the required work for this course.
2. Experienced extenuating circumstances which prevent completion of the course requirements.

It is the exclusive responsibility of each student receiving an Incomplete to be in communication with the instructor and complete the course(s) by the deadline established by the instructor (maximum of 45 days). The instructor will then initiate a Change of Grade form. If the instructor is no longer available, the student should contact the supervising instructional division dean. If the work required is not completed by the deadline established by the instructor, the grade specified by the instructor will be posted to the permanent record.

In Progress (IP) Grades

"IP" is a grade indicating a student has not yet met course requirements and a final grade has yet to be assigned. It is not to be used as an alternative to an Incomplete grade. The IP grade must be replaced by a final grade when the student has completed the course.

Satisfactory (S)/Unsatisfactory (U) Grades

Yavapai College encourages each student to explore areas of study outside the major field of study. The S/U grading option is one way the College stimulates this exploration.

The "S" grade is defined as equivalent to a grade of "C" or better on the conventional grading scale of A-F. A course completed with an "S" grade indicates appropriate subject area knowledge to satisfy the prerequisite requirement of a related higher-level course.

Specified courses are graded only S/U. Students who prefer the S/U grading option must notify the class instructor. Conditions of Satisfactory/Unsatisfactory (S/U) grading:

- Since some college and universities limit the number of credits completed with S/U grading that will transfer, or restrict the way that such credits may be applied to degree requirements, it is recommended that students preparing to transfer select the S/U grading option only for elective courses.
- A maximum of twelve (12) hours of "S" credit from 100- and 200-level courses may be applied toward Yavapai College graduation requirements.
- A maximum of twelve (12) hours of "S" credit from 300- and 400-level courses may be applied toward Yavapai College graduation requirements.
- S/U grading is not an option for courses applied to the Arizona General Education Curriculum (AGEC).
- S/U grades are not computed in the student's Yavapai College grade point average.

Repeating a Course

A student may repeat any course offered by Yavapai College in order to improve a grade, or gain additional knowledge, experience, or other benefit, limited only by the following conditions:

- The credit earned in repeated courses will only be counted one time for completion of degree/certificate requirements unless otherwise noted in the course description
- A student may enroll in concurrent sections of a course only if the course is numbered 000-099
- Repeated courses may not be eligible for federal Financial Aid funding or veteran education benefits
- An individual student's repeat enrollments in specific courses may be restricted if it is determined to be in the best interest of the student or College

All grades appear on the permanent transcript. Included in the cumulative grade point average is the highest single grade earned in a course and all applicable grades earned in repeatable courses.

Records

Directory Information

In compliance with FERPA, Yavapai College designates the following personally identifiable information about a student as directory information. Unless restricted by a student, directory information *may* be released to the public without the prior consent of the student. The student may request a privacy hold ("confidential hold") in person or in writing. These requests remain in effect until revoked in person or in writing. Directory information includes: name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of athletic team members, dates of attendance, degrees and awards received, ID number, the most recent previous educational agency or institution attended, photographs, email address, and grade level.

Student Records Disclosure

The Family Educational Rights and Privacy act of 1974 (FERPA) affords eligible students certain rights with respect to their education records. (An "eligible student" under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution.) These rights include:

1. The right to inspect and review the student's education records within 45 days of the day Yavapai College receives a request for access. A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may

be inspected. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes is inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.
 - A student who wishes to ask the College to amend a record should write the school official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed.
 - If the College decides not to amend the record as requested, the College will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to provide written consent before the College discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.
 - The College discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of the College who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Yavapai College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA are:

Family Compliance Office
U.S. Department of Education
400 Maryland AVE S.W.
Washington, DC 20202-5901

FERPA permits the disclosure of PII from students' education records, without consent of the student, if the disclosure meets certain conditions found in 99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully-issued subpoenas, disclosures of directory information, and disclosures to the student, 99.32 of FERPA regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. A postsecondary institution may disclose PII from the education records without obtaining prior written consent of the student-

- To other school officials, including teachers, with the College whom the school has determined to have legitimate educational interests. This includes contractors, consultants, volunteers, or other parties to whom the school has outsourced institutional services or functions, provided that the conditions listed in 99.31 (a)(1)(i)(B)(1)-(a)(1)(i)(B)(2) are met. (99.31(a)(1))
- To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for the purposes related to the student's enrollment or transfer, subject to the requirements of 99.34. (99.31(a)(2))
- To authorized representatives of the U.S. Comptroller General, the U. S. Attorney General, the U.S. Secretary of Education, or State and local educational authorities, such as a State postsecondary authority that is responsible for supervising the university's State-supported education programs. Disclosures under this provision may be made, subject to the requirements of 99.35, in connection with an audit or evaluation of Federal- or State-supported education programs, or for the enforcement of or compliance with Federal legal requirements that

relate to those programs. These entities may make further disclosures of PII to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement or compliance activity on their behalf. (99.31(a)(3) and 99.35)

- In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (99.31(a)(4))
- To organizations conducting studies for, or on behalf of, the school, in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction. (99.31(a)(6))
- To accrediting organizations to carry out their accrediting functions. ((99.31(a)(7))
- To parents of an eligible student if the student is a dependent for IRS tax purposes. (99.31(a)(8))
- To comply with a judicial order or lawfully issued subpoena. (99.31(a)(9))
- To appropriate officials in connection with a health or safety emergency, subject to 99.36. (99.31(a)(10))
- Information the school has designated as "directory information" under 99.37. (99.31(a) (11))
- To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of 99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding.(99.31(a)(13))
- To the general public, the final results of a disciplinary proceeding, subject to the requirements of 99.39, if the school determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the school's rules or policies with respect to the allegation made against him or her. (99.31(a)(14))
- To the parents of any student regarding the student's violation of any Federal, State, or local law, or of any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if the school determines the student committed a disciplinary violation and the student is under the age of 21. (99.31(a)(15))

Transcripts

Transcripts are permanent academic records released by written consent (signature) of the student.

- **Order online**
 - Current students: login www.yc.edu - Students/My Official Transcript Request
 - Former students: www.yc.edu/transcripts
- **Order by mail**

If ordering by mail, the written request must include the student's signature, current mailing address and phone, and must identify where the transcript is to be sent. A \$10 check or money order must be included for each transcript requested.

*Yavapai College Office of the Registrar
1100 E. Sheldon St.
Prescott, AZ 86301*

- **Order in person at the Prescott Campus - cost is \$10.00 per transcript**

Complete a transcript request and pay \$10 to the cashier.

Students who have completed work at other institutions and wish to apply credits toward their Yavapai College degree or certificate must have official transcripts sent to the Office of the Registrar at the address below. Transfer students should meet with an academic advisor to achieve maximum benefit when establishing an education plan. Students receiving veteran education benefits are required by VA regulations to submit official transcripts from all colleges, universities, technical schools, non-accredited institutions and military training.

*Yavapai College Office of the Registrar
1100 E. Sheldon St.
Prescott, AZ 86301*

Student Rights & Responsibilities

Academic Integrity

Honesty in academic work is a central element of the learning environment. The presentation of another individual's work as one's own or the act of seeking unfair academic advantage through cheating, plagiarism or other dishonest means are violations of the College's academic policy and will result in disciplinary action, up to and including dismissal from the College.

Plagiarism

Plagiarism is defined as submitting any academic work which is not entirely the work of the student, deliberately or accidentally. This can include, but is not limited to, such practices as not giving proper credit to a source, expanding someone else's work without giving proper credit, adopting another's work as one's own (including the copying of print or electronic media), directly using someone else's ideas without giving proper credit, and deliberately changing selective words to misrepresent someone else's work as one's own.

Cheating

Cheating is defined as submitting assignments, examinations, or other work which is based on deception or misrepresentation of the individual's own work. Cheating includes actions that provides a person with an unfair academic advantage in the class such as the furnishing of materials to another person or to oneself for purposes of gaining an unfair academic advantage. Cheating includes, but is not limited to:

- 1) the use of any unauthorized assistance in taking quizzes, tests, or examinations;
- 2) use of sources or materials beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
- 3) the use or acquisition, without permission, of tests or other academic material belonging to a member of the College faculty or staff;
- 4) engaging in any behavior specifically prohibited by a faculty member in the course syllabus or class discussion.

Fabrication

Fabrication is the intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

Violation of Copyright

The unauthorized reproduction or use of copyrighted material, whether print or electronic media, is unacceptable and considered an act of academic dishonesty. In addition, the violator may be subject to legal penalty since such practice is illegal.

Penalties

The following penalties may be applied in instances of misconduct (e.g. academic dishonesty, unacceptable behavior in the learning environment, or disrespectful communication):

1. **Removal from Class:** an instructor may dismiss a student from a class meeting or learning environment for misconduct. This action shall be immediately reported to the supervising instructional Dean. The student must confer with the instructor and the supervising instructional Dean before being readmitted to class. In extreme cases, the student may be dropped from class.
2. **A grade of "F"** (failure) may be awarded for the assignment or activity in which misconduct occurred or for the entire course regardless of the length of time the student has been in attendance. The grade of "F" will override or supersede any student-initiated withdrawal from the course.
3. **Referral to the Code of Conduct Procedures under Section VII:** if the student's conduct is deemed in need of action beyond academic recourse by the supervising instructional Dean, the student will be

referred to the Student Conduct Officer for review under Section VII. Sanctions may include suspension, expulsion, and/or revocation of degree and/or certificate.

4. **Legal measures** may be taken by Yavapai College, including referral to law enforcement or civil action.

Academic Load

Classes routinely require two to three hours of outside preparation for each hour spent in class. Some specialized academic programs may require additional outside preparation. To ensure that students have every opportunity for success in courses, academic loads must be carefully planned.

Full-time student status is defined as 12 credit hours per semester. A typical academic load for many programs is 15-16 credit hours per semester; the maximum academic load is generally 18 credit hours. Students wanting to take 19-20 credits will work with their advisors for approval. While working with an advisor, only a student with a grade point average of 2.8 or better of full-time work is allowed to carry more than the maximum load. A maximum of 12 credits will be approved in an 8-week timeframe. Students wanting to take a total of 21 credits or more need Director of Advising approval. A student not qualifying may petition the District Director of Academic Advising or designee for permission to carry an overload.

Students who are employed or who undertake many extracurricular activities will find it advisable to reduce their academic loads accordingly.

Academic Renewal

Academic Renewal allows a student who experienced academic difficulties during earlier attendance at Yavapai College to have grades for a particular period of time excluded from the calculation of the grade point average. All courses and grades remain on the student's permanent academic record.

Conditions:

- Before applying for Academic Renewal the student must complete at least twelve credit hours of academic course work with a grade of "C" or better in each course.
- Application for Academic Renewal may be made after a two-year waiting period from the last semester to be considered for renewal.
- Academic Renewal is granted on a semester basis, not on a per course selection basis. The student may have a maximum of four consecutive semesters (including summer) of course work disregarded in calculations regarding academic standing, grade-point average, and eligibility for degree or certificate completion.
- Academic Renewal may be granted only once during a student's academic career at Yavapai College and may not extend to other institutions.
- If a student's application for Academic Renewal is approved, the student's permanent record will be annotated to indicate that no work completed during the disregarded semester(s) or term(s), even if satisfactory, may be calculated in the grade-point average or applied to completion of certificate/degree requirements. Academic Renewal is not available to students who have already completed requirements for a certificate or degree. Since the student's complete record (before and after Academic Renewal) remains on the transcript, other institutions may consider all course work when a student transfers or applies to professional or graduate-level programs.

Procedures:

1. The student application for Academic Renewal must be obtained from an academic advisor.
2. The student's academic advisor must sign the form and attach a copy of the student's transcript and forward to the Office of the Registrar.
3. The application must be approved by the Registrar. If approved, the Registrar will update the student's transcript.

Academic Requirements

Yavapai College has established academic requirements which must be met before a degree or certificate is granted. Faculty, Deans, academic advisors and other staff are available to help the student understand and meet these requirements, but the student is responsible for fulfilling them. At the end of a student's course of study, if requirements for graduation have not been satisfied, the degree or certificate will not be granted. For this reason, it is important for the student to be acquainted with all requirements, to remain currently informed of all requirements and to be responsible for completing the requirements. Courses, programs, and requirements described in the catalog may be suspended, deleted, restricted, supplemented or changed at any time at the discretion of the Yavapai College District Governing Board.

Acceptable Use

Yavapai College technological equipment and resources must be used in accordance with the Technology Resource Standards (5.27), Copyright Use (2.28) and Peer-to-Peer (P2P) File Sharing (5.26) policies. Use of Yavapai College equipment and resources to illegally copy, download, access, print or store copyrighted material or download pornographic material is strictly prohibited. For example, file swapping of copyrighted material, such as music or movies is strictly prohibited. Users found to violate this policy will have their privileges to use Yavapai College technological equipment and resources revoked.

Attendance Policy

Yavapai College offers courses in a variety of delivery formats. Students are expected to attend classes and/or actively participate in all credit courses regardless of the delivery method.

All course syllabi will state attendance and class participation requirements. Syllabi will also define any consequences for not adhering to attendance and/or participation requirements.

The course calendar must identify assignments that require student participation in class activities or due dates for course assignments.

Code of Conduct

The Office of Student Conduct and Community Standards supports the educational mission of Yavapai College by upholding the standards of conduct. The intended purpose of the Code of Conduct is to maintain order and stability and to preserve all educational functions by setting forth standards of behavior and by promoting respect for the rights of all individuals.

Our goal is to provide the student with an overview of the student disciplinary process, serve as a resource for addressing student conduct, and to help you stay safe on campus. If you have any questions, need assistance or would like to consult with a staff member in the Office of Student Conduct and Community Standards, please call 928.776.2211. The Code of Conduct can be reviewed at <https://www.yc.edu/v6/student-services/docs/code-of-conduct.pdf>.

College Photo and Videotape Policy

Yavapai College takes photos and videotapes of students throughout the year. These photographs often include students in classrooms, study areas, residence halls, athletic events and so forth. Yavapai College reserves the right to use these photographs as part of its publicity and marketing efforts. Students who enroll at Yavapai College do so with the understanding that these photographs might include them and might be used in College publications and for publicity.

Drug Free Schools and Campuses

Drug and alcohol abuse is known to cause many health risks that could prevent persons from attaining their full physical and mental potential. Consequently, Yavapai College fully supports the intent of the Drug Free Schools and Communities Act Amendments of 1989. Yavapai College will provide a drug and alcohol-free environment for its employees and students. On campus possession or consumption of alcoholic beverages or intoxication by any person is prohibited. The manufacture or cultivation, distribution, dispensing, possession, or use of any type of controlled substances (including,

but not limited to, barbiturates, opiates, marijuana, amphetamines, or hallucinogens) or aiding in the use of such by any persons is prohibited. Information regarding: 1) the laws governing the distribution, use and possession of drugs and alcohol; 2) the health risks associated with substance abuse, and; 3) education and prevention services and programs may be found in the Clery Report at: <https://www.yc.edu/v6/college-police/clery.html>. The Clery Report is released each October for the previous 12 months, and is compiled by the Office of Campus Safety.

Harassment

Yavapai College maintains a Zero Tolerance policy for unlawful or discriminatory harassment. The College is committed to creating a harassment-free environment for all employees and students. Necessary action will be taken to prevent, correct, and if needed, discipline persons whose behavior violates this policy. Disciplinary action may result in measures up to and including termination of employment or expulsion from enrollment.

Skills Assessment, Advisement and Placement Policy

Yavapai College believes that correct course placement is a powerful factor in student retention and success. Therefore, the college requires assessment of competency in reading, writing and mathematics.

Skills Assessment

We want students to be successful at Yavapai College. Enrolling in courses that are appropriate to the student's level of preparation is an important step on the road to success.

The skills assessment helps students to identify strengths as well as where development is required to provide a strong foundation prior to enrolling in college-level courses. The results will guide students in the right direction to complete their educational goals without taking courses which they don't need, and/or taking courses for which they are not prepared.

The skills assessment is not an admission test. When students meet with their academic advisor, they will also review other evidence of college readiness, such as high school transcripts, ACT or SAT scores, and copies of transcripts from other colleges/universities that the student has attended.

Reading Proficiency

All students enrolling in any course that has designated the prerequisite of Reading Proficiency, must demonstrate proficiency in reading by passing a reading assessment or by meeting another measure. The English/Reading placement chart is posted on the Yavapai College Testing Services website at www.yc.edu/testing-services. Students not meeting a measure as listed in the chart will be required to complete ENG 095 before enrolling in these courses.

Math and English Skills Assessment

Students who intend to take English, math or certain general education courses for the first time are required to take the English, reading and math skills assessment prior to enrollment (there are several measures for meeting these requirements). Students should begin in the course(s) in which they place in their first semester and continue to enroll in the course in which they qualify until the college requirements are satisfied. See specific degrees for applicable course sequencing.

Standards of Academic Progress

The College has a process by which a student who experiences academic difficulty may receive assistance to improve academic performance and progress toward educational goals. Unsatisfactory academic progress is indicated by academic warning, academic notice, and academic suspension.

In order to plan a program of study and create an awareness of College resources which will assist a student's return to satisfactory academic standing, a student who has made unsatisfactory academic progress must meet with an academic advisor. Academic advisors may limit the number of credit hours a student may enroll in, require developmental classes, or recommend other resources that may assist the student.

In order for a student to be removed from academic warning or academic notice status, the student must attain academic good standing (2.00 Cumulative GPA). A student's academic status will be determined at the end of each semester. The student who has made unsatisfactory academic progress will receive written notification at the end of the semester.

The academic standards categories and resulting status of students are listed below.

Academic Warning:

A student who has attempted 12 credits or more and earned a cumulative GPA of less than 2.0 is placed on Academic Warning (AW).

A student on academic warning (AW) may continue attending school as long as the student maintains a semester GPA equal to or greater than 2.0, based on attempted credits.

The academic warning (AW) standing will remain in effect until the cumulative GPA meets or exceeds 2.0, at which time the academic warning (AW) standing is removed.

Academic Notice:

If a student on academic warning (AW) earns less than 2.0 semester GPA in the subsequent semester, based on attempted credits, the academic warning (AW) standing converts to academic notice (AP).

A student on academic notice (AP) may continue attending school for up to two subsequent semesters. During the first semester on academic notice (AP), the student must achieve a semester GPA of 2.0 or above. During the second semester of academic notice (AP), the student must achieve a cumulative GPA of 2.0 or above.

Academic Suspension:

If the student on academic notice (AP) does not meet the above requirements, the academic standing converts to academic suspension (AS) and the student will be suspended from Yavapai College.

Petition for Reinstatement

A student who has been placed on academic suspension may petition to the Dean of Students (or designee) in writing, stating the reasons why the academic status and stated restrictions should be waived or changed. A petition will be considered after a minimum one semester waiting period. The petition is to be submitted at least one week prior to the semester for which enrollment is requested. If reinstatement is approved, the student will be placed on academic probation (AP) and progress will be reviewed at the end of each semester. The decision of the Dean of Students (or designee) is final.

Student E-Mail Accounts

Yavapai College requires enrolled students to have an e-mail address to which official College communications can be sent. In the best interest of effective communications management, this address will reside on the College maintained e-mail system. Students may elect to forward their e-mail to an address different from their official Yavapai College account, but these students assume full responsibility for reading e-mail at the forwarded location. *Students are expected to check their Yavapai College e-mail account, or the account to which their Yavapai College e-mail is forwarded, prior to the first class meeting and at least once a week during the semester.* If you have questions regarding your student e-mail account, contact the Yavapai College Help Desk at 928.776.2168 or 800.922.6787 X2168.

Student Appeals/Complaints

Non-Academic Complaints

The Yavapai College process for non-academic complaints is to be used for issues other than disciplinary or academic matters and provides students protection against unwarranted infringement of their rights. A non-academic student complaint may concern an alleged violation of college policies, infringement of student rights, and other such problems dealing with students, college staff and faculty, and authorized college

activities. Students may submit a Formal Statement of Student Complaint here: <https://www.yc.edu/v6/student-services/nonacademic.html>

The following procedures will be followed to insure an appropriate resolution of a student nonacademic complaint at the lowest possible level:

1. The student will attempt to rectify the complaint with the person or party directly involved in the alleged violation within ten (10) college business days. For the purpose of this policy, a "business day" shall be a weekday during which regular classes are being held at the college. Every effort will be made to resolve the complaint at the lowest possible level.
2. Where resolution is impossible or unsatisfactory to either party, the student should appeal to the appropriate supervisor within ten (10) college business days. The supervisor will informally discuss the matter with the student in an effort to resolve the complaint.
3. If the student feels the complaint has not been resolved, they may submit a written complaint to the Dean of Students within ten (10) college working days from the time the complaint was filed at the previous level. The Dean will work with all parties involved to mediate the complaint in a timely manner. In order to mediate the complaint, the Dean may engage faculty or staff members relevant to the complaint in an informal discussion. The decision of the Dean of Students regarding a non-academic complaint is final.

Distance Education students outside of Arizona, after completion of the institution's internal complaint process, may appeal SARA related complaints to the Arizona Community College Coordinating Council (AC4).

The Arizona SARA Council has jurisdiction over Arizona SARA approved institutions regarding non-instructional complaints for distance education students. Upon completion of the institution's and AC4's complaint process, a student may register a complaint with the Arizona SARA Council. Visit the AZ SARA Complaint Process website for more information. For students who are residents of states outside of Arizona, consumer inquiries also may be directed to the following Consumer Protection Agency of the state in which they reside.

Students can view the State Authorization website for more information.

Academic Complaints

Visit www.yc.edu/academiccomplaints for additional information and to submit the appeal.

Policy Number: 3.16

Title: Student Appeal of Academic or Instructional Decisions by Faculty

Procedure - Student Appeal of Academic or Instructional Decisions by Faculty Procedure, 3.16.01

- **Appeal Requirements**

1. A student may appeal an academic or instructional decision by faculty if they believe the decision was made in error.
2. The appeal must be made in a timely manner in accordance with the established procedures documented below.
3. A student may only appeal a decision that affects him/her directly and must represent themselves in the appeal process.
4. The appeal of an academic or instructional decision requires documentation that the decision was incorrect.

- **Appeal Procedure**

- A. **Step 1** - The first step in the appeal process is for the student to contact the faculty member who made the academic or instructional decision.
 - This contact must be made within 10 business days of the official notification date of the decision.

- For appeals concerning a final grade, official notification is considered to be the date the grade is posted to the student's permanent record.
- B. **Step 2** - In the event the faculty member and student are unable to reach a mutual agreement within ten (10) business days, the student may then appeal to the appropriate Associate Vice President (AVP) and/or Dean.
 - The appeal to the AVP and/or Dean must be made within 10 business days in writing using the official form, "Academic or Instructional Decision Appeal to the AVP and/or Dean." All documentation supporting the reason for the appeal must be provided at the time the appeal is submitted.
 - This appeal must succinctly describe the issues involved, evidence that an error was made, and any relevant information. Missing, incomplete or erroneous information may cause the appeal to be rejected.
- C. **Step 3** - The AVP and/or Dean will review the student's appeal and make a decision based on the documentation provided by the student, the faculty member, and other relevant information that may include meetings with appropriate individuals.
 - The AVP and/or Dean's investigation and decision must be concluded within 10 business days of the date the student appealed the decision to the Dean.
 - The AVP and/or Dean will provide written documentation of the decision to the student and faculty member.
 - The decision of the AVP and/or Dean is final.

Student Success: A Shared Responsibility

Becoming a successful student involves taking responsibility for your own experience at Yavapai College. Your college success can be measured not only in terms of acquiring skills and knowledge, but also through personal growth and development. Certain factors will contribute to your success, such as:

- Having clearly defined goals
- Knowing your skill levels
- Being aware of campus resources to support your efforts
- Recognizing that you are continually changing and growing as a person

Student Development staff share in the responsibility for your success by fostering an environment where your needs in each of these areas can be addressed. Working with our team of support personnel and other College resources, you will get the maximum benefit from your experience at Yavapai College. Establish your relationships with Student Development staff members early in your college career. We are committed to sharing in the responsibility for your success.

Title IX Policy Statement

Title IX of the Education Amendments Act of 1972 provides that: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Title IX - 20 U.S.C. § 1681. Yavapai College prohibits discrimination on the basis of sex in admissions, recruitment, education, employment, enrollment, as well as in the provision of all services, programs and activities. Consistent with these values and applicable laws, Yavapai College maintains a comprehensive program designed to protect members of the College community from discrimination on the basis of sex. Yavapai College also prohibits retaliation against any person opposing discrimination or participating in any discrimination investigation or complaint process internally or externally. Reports of sexual harassment, sexual misconduct, questions regarding Title IX, and concerns about noncompliance should be directed to the Title IX Coordinator. For a complete copy of the policy or for more information, please contact the Title IX Coordinator, Monica Belknap at Monica.Belknap@yc.edu, 928-776-2211.

Alternatively, or in addition to the College Title IX Coordinator, inquiries may be directed to the U.S. Department of Education's Office for Civil Rights, the federal agency charged with enforcing compliance with Title IX:

Arizona State Local Office for Civil Rights Denver Office
U.S. Department of Education
Cesar E. Chavez Memorial Building
1244 Speer Boulevard, Suite 310, Denver, CO 80204-3582
Phone: (303) 844-5695 | Fax: (303) 844-4303 | Email: OCR.Denver@ed.gov | Web: <http://www.ed.gov/ocr>

Please visit the College webpage at <https://www.yc.edu/T9> for more information about Title IX.

Tobacco Use Policy

Yavapai College is committed to limiting exposure to the harmful effects of primary and secondary smoke to campus students, visitors, and employees. In order to reduce the harmful effects of tobacco use and to maintain a healthful working and learning environment, the College prohibits smoking, including vaping, on all campuses except in designated smoking areas as per the Smoking & Tobacco Use Policy (10.09).

Visitors and Guests in Class

An enrolled student may occasionally bring a guest to class, upon permission of the instructor. Guests who wish to visit frequently will be denied entrance to the class unless they register officially for the class. Safety considerations or disruption of instruction may require that guests not be permitted to attend a class.

Student Resources

Academic Success, Advising and Counseling

Students start their journey with an assigned Enrollment Advisor to help them navigate their first semester at Yavapai College. From the start, students will have the support they need to understand their next steps, from completing their financial aid file, identifying academic and career goals in order to select the best program, or helping research the local job market or university for transfer. After completion of their first semester, students are transitioned to their Retention Advisors to help them stay on track through the completion of their academic goals and beyond.

Advisors also assist students in adjusting to college life and in developing skills for success as a student's go-to resource to work through issues, providing information, resources, and referrals. Advisors provide support to students during their entire college experience.

Academic Advising is required for students who meet any of the following criteria:

- Student athletes
- International students
- Majors in nursing, paramedicine, aviation, radiologic technology, gunsmithing, commercial driving training
- Financial aid recipients who need to file an appeal
- Students seeking to take more than 18 credits in one semester

Students in these categories who wish to register must first consult with an academic advisor. To request an appointment with an academic advisor, students can call 928.776.2106 or 928.634.6510. Additional information can be found at www.yc.edu/advising or can be requested by email: advising@yc.edu. Advising services are available at Prescott, Verde Valley, Career and Technical Education Center, Chino Valley and Prescott Valley.

Counseling Services

Students sometimes find it difficult to adjust to being a college student whether they are commuting or living on campus. Yavapai College wants to assist students who are experiencing difficulty with college life adjustments through local resources and referrals. Please visit <https://www.yc.edu/v6/student-services/wellness/> for more information.

Adult Basic Education

ABE (Adult Basic Education) provides adults with an opportunity to improve basic skills necessary to:

- Obtain a GED/HSE
- Academic readiness for career and college
- Pursue further education
- Get or keep a job
- Help their children achieve in school
- Participate more effectively in the community
- Learn English as a second language

Free ABE classes, funded by the Arizona Department of Education, are open to adults age 16 or older and who are eligible for services. The following classes are available:

- GED/HSE Study Program: GED/HSE stands for General Educational Development and is a way for adults to earn a high school equivalency diploma.
- Basic Skills Enhancement: Sometimes adults who have a high school diploma find that they need to learn new reading, writing, or math skills.
- ESOL: English for Speakers of Other Languages is for immigrants and refugees who are permanent residents of the United States. Classroom activities are designed to help adults adapt to a new culture and improve their English skills in the areas of speaking, listening, reading and writing.

- IET (Integrated Education and Training) Follow a career pathway of Yavapai College classes leading to an industry-recognized employment credential, all while taking our GED/HSE or ESOL classes.

ABE Transitions Program

The ABE Transitions Program serves students enrolled in the college's Adult Basic Education (ABE) program. Specialized services designed to help students transition into college or career training programs are offered. The program is open to all current or former GED/HSE and ESOL students.

Components of the program include:

- Assistance with the college admission and application process
- Academic advising and course registration assistance
- Workshops and trainings focusing on career exploration, goal setting, financial aid, and technology enrichment
- Field trips to Arizona colleges and universities
- Scholarships based on special eligibility

For more information, call 928-717-7357.

Bookstore Purchases

Students can purchase or rent required textbooks, as well as purchase reference materials, supplies, Yavapai College clothing and gifts at the online Yavapai College Bookstore at www.yc.edu/bookstore. Questions? Call 928.717.7777 for assistance.

Academic Honors at Yavapai College

YC HONORS

The YC Honors fosters academic, personal, and professional growth for students with a GPA of 3.25 or higher across their college coursework and high school graduation. Participants engage in enriching courses that enhance critical thinking and collaborate with distinguished faculty, while also benefiting from mentorship, leadership opportunities, and financial support a course scholarship. With a requirement to enroll in at least one honors course each semester, students gain special recognition on transcripts and diplomas, along with access to networking events and extracurricular enrichment. Once admitted, students maintain their status by upholding eligibility, ensuring a continuous journey of academic excellence and community engagement. Students are admitted twice a year. For more information and to apply, visit www.yc.edu/honors.

PHI THETA KAPPA

Yavapai College is home to the award-winning Beta Gamma Pi chapter of Phi Theta Kappa (PTK), an international honor society for two-year colleges and academic programs. As the largest honor society in American higher education, PTK boasts over two million members and more than 1,200 chapters across all 50 states and abroad. The organization emphasizes its four cornerstones: Scholarship, Leadership, Service, and Fellowship. Members learn undergraduate research skills, engage in leadership and service, and develop fellowship with peers. Additionally, student members have the opportunity to receive competitive scholarships when transferring to their chosen universities, further enhancing their educational journey.

More information about the program is available on the PTK website at <http://www.yc.edu/ptk>.

College Police

Arizona Revised Statutes recognize Yavapai College Police Department (YCPD) officers as peace officers, providing them with full enforcement authority in the State of Arizona. YCPD officers are commissioned under the authority of the Yavapai College District Governing Board with jurisdiction of all campuses and property owned and/or utilized for educational purposes by Yavapai College approved by the District Governing Board.

Yavapai College Police Department (YCPD) services include:

- Responding to emergencies on campus
- Investigating traffic accidents
- Investigating crimes and violations of college policy
- Delivering emergency messages in the event of a threat or critical incident response
- Victim Advocacy: Assisting victims of crime with crime reporting, obtaining an Order of Protection/Injunction Against Harassment, assisting with SANE/Strangulation exam appointments, accompaniment to court, assistance navigating the legal system, obtaining resources, etc.
- Patrolling and monitoring the campus grounds for intrusion, fire, criminal activity and hazardous conditions on all 6 campuses/centers
- Traffic control and sign placement
- Providing security consultation to the campus community, to the Performing Arts Center, and to the public
- Monitoring fire alarms
- Maintaining lost and found
- Serving as a central location for campus safety information
- Providing crime prevention seminars and programs such as De-Escalation, Civilian Response to Active Shooter Events training, Rape Aggression Defense (women's self-defense) training, and Stop the Bleed
- Assisting with requested door locks/unlocks
- Assisting local Police agencies in the surrounding communities
- Participation in annual Tabletop scenarios in conjunction with YC Executive Leadership to prepare for a critical incident
- Hosting various events to bring awareness to Mental Health, Sexual Assault, and Domestic Violence

Campus Crime Reporting

The Yavapai College Police Department provides crime statistics for all campuses. These statistics can be obtained from the College Police Office, Student Affairs Office or on the **College Police website**.

Notification of college crime statistics is either mailed in post card format or sent by e-mail each year to currently enrolled students, faculty and staff. Prospective students are advised of the availability of the crime statistics through recruiters and also through the **College Police website**. Federal law, through the Department of Education, mandates that Yavapai College provide the college community with this information annually. The annual report is available on the **College Police website**, and also available for distribution at the College Police Department.

Disability Resources

The Mission of Disability Resources is to ensure qualified persons with disabilities equal access and reasonable accommodations in all Yavapai College's academic programs and activities.

Disability Resources provides services to students who qualify under the Americans with Disabilities Act, ADA Amendment Act 2008, and Section 504 of the Rehabilitation Act of 1973.

Students must self-identify and register with the Disability Resources office and provide required documentation verifying the nature and extent of their disability. The Disability Resources office is responsible for evaluating documentation and determining accommodation eligibility. All situations shall be considered on an individual, case-by-case basis.

Students requesting reasonable accommodations must do so by registering with Disability Resources in a timely manner, usually two to four weeks prior to the start of the semester. Without two to four weeks notice, we cannot assure the timely availability of accommodations. The process of determining reasonable accommodations is collaborative among the student, Disability Resources staff and other college staff and faculty when necessary.

Assistance is available at all Yavapai College locations. Please visit our website at www.yc.edu/disabilityresources or call us at 928.776.2085 for more information.

Discover Yavapai Information Session

Discover Yavapai Programs are designed for students and families who are exploring their options for college. The program provides general information about Yavapai College, programs, and services. The agenda includes:

- General information session about admission, cost of attendance, degree programs, financial aid and residence life
- Campus tours, led by Student Ambassadors

This event is reservation only. To sign up, please go to www.yc.edu/tours.

Questions? Contact the Admission Office at 928.717.7777 or 928.634.6510.

Campus Tours

Yavapai College offers campus tours to prospective students and their guests. Take a campus tour and learn about our degree and certificate offerings, support services and get connected to the resources that will set you up for success! Visit www.yc.edu/tours to sign up for a tour with a Yavapai College Student Ambassador. Group tours are also available for local high school, middle school, and elementary school students. Group tours must be scheduled at least 2 weeks prior to the date you wish you visit. For more information, please contact the Admission Office at 928.717.7777 or 928.634.6510.

Financial Aid

Types of Aid

Our Financial Aid Office offers many opportunities from a variety of sources to help our students with their educational expenses. Federal aid from the Department of Education, like the Pell Grant, is the greatest source of aid. In addition, Yavapai College offers scholarships (separate application required). Details about federal and state aid, and YC Institutional and Foundation Scholarship programs can be found on the web at www.yc.edu/financialaid.

Ways to classify different types of financial aid:

Financial Aid you don't have to repay:

- Federal and State Grants
- YC Institutional Scholarships
- YC Foundation Scholarships
- Private and Corporate Scholarships
- Student Employment
- Native American Tribal Grants
- Veteran's Education Benefits

Financial Aid you do repay:

- Federal Subsidized and Unsubsidized Direct Student Loan
- Federal Direct Plus Parent Loan for Undergraduate Student
- Interest-free Online Payment Plan
- Private/Alternative Student Loans

General Eligibility Requirements for Federal Financial Aid

Eligibility requirements necessitate that you:

- Be a U.S. citizen or eligible non-citizen with a valid Social Security Number

- Demonstrate that you are qualified to obtain a post-secondary education by having a high school diploma, a General Education Development (GED) Certificate or home school completion equivalent.
- Enroll in an eligible program as a regular student seeking a Financial Aid approved degree or certificate
- Maintain satisfactory academic progress as outlined in policy

How to Apply for Federal Aid

The college uses the Free Application for Federal Student Aid (FAFSA) as its application for federal financial aid programs. Information from the FAFSA may also be used in determining eligibility for the YC Scholarship or other scholarship or grant programs.

The Process

- Apply for a FSA ID and Fill out your FAFSA at: www.studentaid.gov
- Complete and submit the 2025-26 FAFSA (to the Department of Education). It's available online at www.studentaid.gov. Be sure to include the Yavapai College code: 001079.
- The 2025-26 FAFSA is currently available. The 2026-2027 FAFSA will be available in the Fall of 2025 or early in January 2026.
- Check your YC email frequently. You will be notified by email, when we receive your FAFSA results, instructing you to check your eligibility requirements by logging into the YC website, clicking on MyYC, Students, and My Financial Aid. From there you can check for any additional, required documents, complete a YC Foundation Scholarship application and view your Awards.
- The 'Financial Aid Overview' is where you may view your awards, enrollment details and satisfactory progress information.
- The award amounts are disbursed after the add/drop period is over for the term or part of term you are enrolled in. It is applied to any outstanding charges you may still owe the college; any remaining balance at the time will be refunded to the student.

Original award amounts are based on a full-time student enrollment assumption. Awards may be adjusted based on your actual enrollment in courses pertaining to your degree (CPOS) or certificate. **Please note that enrollment in part of term classes or short-term classes may affect your Financial Aid award and refund timelines.** Check with your Financial Aid Advisor if you have questions.

Satisfactory Academic Progress Required for Federal Aid Recipients (SAP)

Federal regulations require that financial aid students maintain Satisfactory Academic Progress (SAP) toward an eligible degree or certificate program.

SAP Standards include:

- Minimum cumulative grade point average of 2.0;
- Rate of Progression 66.67% or greater within a Maximum time frame of 150% for completion of a degree or certificate.

Withdrawal/Repayment Policy for Federal Financial Aid Recipients

Students who withdraw from ALL of their classes will have their financial aid reevaluated to determine the amount of aid that has been earned, and any unearned aid will be required to be paid back. Please note that this repayment calculation will be determined for students who follow official withdrawal procedures as well as for students who stop attending classes. For further details consult your financial aid advisor and/or the Withdrawal/Repayment Policy for Federal Financial aid at: www.yc.edu/v6/financial-aid/policies.html. We strongly suggest that you contact Financial aid prior to withdrawing to see what affect your withdrawal may have on aid already received.

Food Services for Residence Hall Students

Yavapai College food service offers a wide variety of meals based on a food court concept. Residence Hall students are required to purchase a meal plan. Meal plans guarantee a specific number of meals each week for the student.

Roughrider Dollars are also available to supplement the meal plan. Meal plans and prices are subject to change. For further information regarding rates or plans, consult the Residence Life website at www.yc.edu/residencelife or call 928.776.2220.

Meal Plan Refund Policy

1. Changes in the meal plan will not be permitted after the first two weeks of the semester. Meal plan cycles begin on Friday and end on Thursday.
2. Meal plan refunds are given on a weekly pro-rated basis.

Housing

Food Services for Residence Hall Students

Yavapai College food service offers a wide variety of meals based on a food court concept. Residence Hall students are required to purchase a meal plan. Meal plans guarantee a specific number of meals each week for the student.

Roughrider Dollars are also available to supplement the meal plan. Meal plans and prices are subject to change. For further information regarding rates or plans, consult the Residence Life website at www.yc.edu/residencelife or call 928.776.2220.

Housing

Yavapai College offers two co-ed Residence Halls, totaling 220 students. Each hall has laundry facilities, Wi-Fi, cable in the communal areas, and private bathrooms in each room. Rooms are single gender. The halls include a common kitchen area, study rooms, a pool table, a ping pong table, a sand volleyball court, and a basketball court. Applications are accepted until all bed spaces are full and taken on a first-come-first-placed basis. Family Housing is not available.

Housing Reservations

Reservations are secured by the Office of Residence Life upon receipt of all required materials, including non-refundable processing fee, providing rooms are still available. Completed applications received after all spaces are filled will result in students being notified of their placement on a waiting list. Students who do not want to be on a waiting list may cancel their request and should refer to the contract and/or Residence Life Handbook for important dates and deadlines regarding partial refunds, if applicable. Yavapai College Residence Halls are drug and alcohol free.

Tutoring Services

The mission of Tutoring Services is to support student success by providing accessible, high-quality academic help in a welcoming environment that builds confidence and encourages independence and lifelong learning.

Our Services:

- **In-Person & Zoom Drop-In Tutoring, with Appointment Options for Select Subjects** - Available for English, math, and other select subjects.
- **In-Person & Zoom Appointments for Basic Canvas & MS Office Training**- Learn the fundamentals of Canvas and receive assistance with MS Office applications.
- **Online Writing Tutor:**
 - Submit your writing assignment for feedback, with a 48-hour turnaround time. *Assignments submitted on Fridays will be reviewed the following Monday.*
- **Technology & Study Spaces:**
 - Computer stations and laptops equipped with essential academic software.
 - Private and group study rooms are available by reservation, with the option to book immediately or up to two weeks in advance.
- **Workshops & Resources:**
 - Synchronous and asynchronous workshops on test-taking strategies, study skills, and AI tools are offered throughout the semester.

- Study Tools Guide that connects students to valuable academic resources, including YC's Grammarly access for writing assistance and LinkedIn Learning for skill development.

Visit the **Tutoring Services website** for details on hours, tutoring options, workshops, and additional resources. www.yc.edu/tutoring.

Library Services

Library services are available to all Yavapai College students, faculty and staff as well as open to the public. The libraries support all YC-related classes. Yavapai College students can access library services, resources, hours of operation and more at our website (www.yc.edu/library). Library staff assistance is available in person, by phone at 928.776.2260 (Prescott) and 928.634.6541 or use our Ask a Librarian service on our website.

Physical libraries are located on the Prescott (Building 3) and Verde Valley ("M" Building) campuses. Both libraries are members of the Yavapai Library Network. Yavapai College students have access to more than one million items through the 40+ member Yavapai county libraries.

Other services and resources:

- Computers and printers
- Laptops (Students only)
- Hotspots (Students only)
- Wireless access
- Virtual Reality training
- More than 323,000 full-text e-books
- Subject-specific and general interest article databases
- 24/7 access to millions of online magazine and newspaper articles
- Individual and class support for research projects
- Study rooms for group use
- Library instruction for YC classes
- Quiet study space
- Individual and group media viewing facilities
- Interlibrary loan services
- Government documents (Online or Prescott campus only for print)
- Requested items are available 24/7 via After-Hours Pickup Lockers
- Culture Pass - free tickets to various arts and culture treasures such as museums, arboretums, zoos, etc.

Borrowing Information:

- YC students can obtain a library card by presenting a photo ID and proof of current enrollment at Yavapai College.
- YC faculty and staff can obtain a library card by presenting a photo ID and proof of current employment at Yavapai College.
- Community patrons can obtain a library card by presenting a photo ID that includes their current Yavapai county address or a photo ID with proper paperwork confirming Yavapai County residency.
- Any Yavapai Library Network card is valid to use in the library.

Mail Center

The Mail Center is located in Building 7, Room 101B and offers shipping services via US Mail (including stamps), UPS, and FedEx. Faxing, notary services and limited shipping supplies are also available. Residence Hall students receive incoming mail and packages through the lockers in building 3 next to The Eatery. For more information: www.yc.edu/mailcenter.

Osher Lifelong Learning Institute (OLLI)

The Osher Lifelong Learning Institute is a membership organization designed for adult learners 50 years and older. The purpose of the institute is to provide OLLI students with educational, social and cultural experiences. It features collaborative leadership and active member participation. For more information call 928.717.7634 (Prescott) and 928.649.4275 (Sedona/Verde Valley).

Payment Plan

Yavapai College offers an interest-free, automated monthly payment option to help you meet your education expenses. There is a refundable \$25 application fee required per semester. Payments can be set up through automatic withdrawals from your checking or savings account or can be charged to a credit card account. This is available by logging onto the YC website and selecting My Account and then Payment Center. Contact the Business Office or Financial Aid Office for additional details: 928.776.2124.

Regional Economic Development Center (REDC)

The Regional Economic Development Center (REDC) at Yavapai College promotes economic development and growth in the region by supporting new, existing businesses and helping to create a skilled and well-trained workforce. The REDC takes an innovative approach and acts as the ambassador for:

- Workforce training programs
- Workforce and job connections
- Business and industry growth
- Innovation and economic research

More details are available at <http://www.yc.edu/REDC>.

Small Business Development Center (SBDC)

The Yavapai College SBDC (housed in the Regional Economic Development Center) is a resource for small business owners and entrepreneurs, helping them start, grow, and expand their enterprises. Through the SBDC, expert Business Analysts offer no cost, confidential consulting and coaching services in financial forecasting, management excellence, marketing, business planning, strategic planning, and access to capital among other topics. The SBDC also provides no cost trainings and workshops on a variety of business and financial topics, as well as access to an array of business tools, business planning software, and other resources that support business of all sizes and in all stages. For more information visit the SBDC website at <http://www.yc.edu/SBDC> or call (928) 717-7232.

Student Employment Services

Student employees gain crucial preparation for the competitive job market through career-enhancing opportunities. To be eligible for on-campus jobs, students must be currently enrolled in at least six credit hours and must complete a FAFSA application.

Students can find on-campus jobs, community service positions in area schools, and special Community Service Federal Work-Study jobs off campus, all of which give students an opportunity to earn money and to gain valuable skills in a number of career-related environments.

For more information regarding student employment, go to: www.yc.edu/studentjobs, email studentemployment@yc.edu or call the Student Employment office at 928.776.2081.

Student Engagement and Leadership

The office of Student Engagement and Leadership (SEL) programming supports and cultivates an environment that facilitates student success through education, discovery, engagement and leadership growth opportunities.

SEL supports district-wide student activities, clubs, and special events that enhance the quality of student life on all campuses/centers. Through Ruff's House (Virtual Student Union) SEL connects with YC students 24/7.

For more information, call 928.776.2125 or visit our website at www.yc.edu/SEL

Prescott Campus Office: Building 3 Suite 125

Student OneCard

The YC OneCard is your multipurpose mobile student ID. Current YC students, faculty and staff can add their OneCard to their Apple Wallet or Google Pay, and use their smart phone and Apple Watch around campus. By simply placing your phone or Apple Watch near a reader where physical campus IDs are accepted, you can enter residence halls, CTEC buildings, buy lunch, print documents, and more based on your current permissions. Flexicash and local discounts available with your YC ID. More information and a list of discounts is available at www.yc.edu/OneCard.

OneCards are required for:

- Meal plan privileges, flexi-cash debit card privileges, and certain classes and class locations.
- Physical Photo ID cards may be obtained if you are part of the nursing or allied health programs. They will be shipped to the address we have on file. Physical ID cards expire three years after the issue date.

Student Printing at Yavapai College

Yavapai College offers a pay-for-print solution for students. The only method of payment accepted for prints, copies or scans is Flexicash. Funds can be added in the student portal. See student printer locations and instructions at <http://www.yc.edu/mailcenter> under "Print Services."

TRIO Programs

TRIO Student Support Services Program (SSS)

The SSS Program is part of a set of college opportunity programs funded by the U.S. Department of Education designed to motivate and support eligible students in their pursuit of a college education. General eligibility criteria are based on low-income status, first generation college attendance, and/or disability. Other eligibility requirements for program participation may apply.

TRIO Student Support Services (SSS) mission is to encourage and assist eligible students through graduation and/or transfer from Yavapai College.

Free services offered to students accepted into the program include:

- Extended academic advising and university transfer assistance
- Individual tutoring and peer mentoring
- Assistance with financial aid, scholarships, and other resources
- Career exploration and planning
- College success skills and leadership development
- Fieldtrips for cultural and learning enrichment and university visits
- And more

For more program information visit www.yc.edu/ssc, email sss@yc.edu, or call 928.776.2084.

Veterans Education and Transition Services (VET Services)

Individuals eligible to receive Veterans Administration (VA) education benefits must complete and submit all required VA and Yavapai College documents to VET Services. Processing may take weeks, so early planning and class registration is highly recommended. Note: Students seeking to use Military Tuition Assistance (TA) as a method of payment should contact the Bursar's Office at 928-776-2138 or bursar@yc.edu. Information about TA can be found online at www.yc.edu/bills.

To begin using a VA education benefit at Yavapai College, the student must submit a signed VET Services Start-Up application and a Certificate of Eligibility (COE) for the specific VA education benefit to be used. In addition, an online

written request is required from the student each semester upon registering for classes to indicate their intent to use their benefits. Instructions can be found online at www.yc.edu/veterans and in the MyYC student portal.

Students using VA education benefits are eligible to sign up for an interest-free payment plan each semester to defer the cost of tuition, fees and books. They may also be eligible for other types of financial aid such as Pell Grant and scholarships, and are encouraged to apply through the Free Application for Federal Student Aid (FAFSA). Instructions for the Veterans Payment Plan are available by logging into the MyYC student portal.

In accordance with 38 USC 3679(e), students using a benefit under Chapter 31 or Chapter 33 will not be penalized for failing to meet their financial obligations to the college as a result of a delay in VA payments to the school for benefits-payable costs. Students are otherwise responsible for making payment according to their Veterans Payment Plan and other applicable college policies.

Important guidelines for using VA education benefits:

- VA education benefits may only be used for classes that fulfill requirements on an approved degree or certificate program. Rare exceptions may exist for students using benefits under Chapter 31 Veteran Readiness and Employment (VRE). In addition, special rules may be applicable to specific programs of study, in accordance with VA and state regulations.
- VA requires students to order an official transcript from each college, university, and technical school previously attended, and from their military branch. Official transcripts must be sent directly from each school to Yavapai College Office of the Registrar, 1100 E. Sheldon Street, Prescott, Arizona, 86301.
- Students must maintain good academic standing in accordance with Yavapai College Standards of Academic Progress.
- A student may be required to repay an overpayment of benefits to the VA resulting from repeated courses (previously completed at YC or through transfer credit) or for withdrawn courses. When in doubt about a particular situation, it is important to consult VET Services proactively to avoid potential benefits overpayment.
- Students should immediately notify VET Services of any enrollment changes to avoid or minimize potential benefits overpayment. After the start of the term, consultation with VET Services before making schedule changes is strongly recommended.
- Taking classes of varying lengths can impact a student's benefit payments over the course of the semester. VET Services staff are available to help students plan classes for consistent monthly benefit payments where possible.

Free college prep courses are available to veterans and military-affiliated students seeking to refresh or improve their academic skills without affecting their remaining benefits entitlement. Core academic subjects including mathematics, writing, and reading provided by the Adult Basic Education program are designed to prepare students for college-level coursework. Interested students should contact VET Services to discuss individual needs for these and other services.

Section 702 of the Veterans Access, Choice and Accountability Act enables covered individuals (veterans and/or family members) to be eligible for in-state tuition rates. Visit the VA's website at: <https://www.va.gov/resources/in-state-tuition-rates-under-the-veterans-choice-act/>.

For more information call 928.717.7613, email vet.services@yc.edu, or visit online at www.yc.edu/veterans.

Workforce Training

By providing highly trained individuals ready to enter the workforce and excel in their area of expertise, Yavapai College graduates are proof of economic development in action. From Law enforcement officers, paramedics and firefighters to nurses and technical trade workers, YC serves the community by adding to its civil and economic security.

Yavapai College Scholarship Opportunities

Yavapai College offers a wide variety of scholarships based on athletics, academic performance, ethnic background, financial need, area of study, or other criteria. Scholarship awards range from \$100 to \$4000. To apply for the majority of scholarships, only one application form is required. The YC Foundation application is available the beginning of December each year, by logging onto the YC website and selecting Students, My Financial Aid. The deadline is May 1st for the following Fall. For detailed information regarding Yavapai College and other scholarship opportunities, students may visit our website at www.yc.edu/financialaid.

Earning a Degree or Certificate

Yavapai College offers seven associate degree programs and four bachelor degree programs:

- Associate of Arts
- Associate of Arts in Elementary Education
- Associate of Arts in Fine Arts
- Associate of Business
- Associate of General Studies
- Associate of Science
- Associate of Applied Science
- Bachelor of Applied Science in Business
- Bachelor of Science in Business
- Bachelor of Science in Computer Science
- Bachelor of Science in Nursing

Associate Degree and Certificate Requirements

To obtain an associate degree or certificate from Yavapai College, a candidate must:

1. Satisfy any program-specific admission requirements.
2. Earn a cumulative grade-point average of 2.00 or better in all work completed at Yavapai College.
3. Successfully complete all courses required in one of the degree or certificate programs offered by Yavapai College.
 - Program requirements may change between the time of the student's admission and the time of graduation.
 - A student in continuous enrollment at Yavapai College may elect to graduate by satisfying program requirements as listed at the time of admission, at the time of graduation, or at any time during the last period of continuous attendance. Continuous attendance means enrollment in the regular session (fall/spring or spring/fall) of each academic year.
 - If a course required for a degree or certificate has been deleted from the catalog, a comparable course will be substituted for the deleted course. Other substitutions are generally not permitted. However, a student who believes circumstances warrant special consideration may petition to the supervising dean.
4. Earn a grade of "C" or higher in a course for it to apply toward a Yavapai College degree or certificate, or for inclusion in Arizona General Education Curriculum.
 - A maximum of 12 credit hours of "S" grades from 100- & 200- level courses may be applied toward a Yavapai College lower division degree/certificate program.
 - On an exception basis, "S" grades may be allowed in the AGEC for transfer credit, if documentation by the community college indicates that the "S" grade issued was the only option for the student and the "S" is "C or better." (For Spring 2020 only, students who chose an "S" grade in an AGEC course in response to the COVID-19 emergency may use this grade to complete their AGEC requirements at Arizona universities.)
 - A maximum of 12 credit hours of Independent Study courses may be applied toward any Yavapai College degree program.
 - Special interest and developmental education courses (courses numbered below 100) will not be applied toward degrees and certificates.
 - Students may fulfill degree requirements after leaving Yavapai College by transferring back applicable credits earned at regionally accredited institutions of higher education. Students must adhere to the catalog requirements of their program of study during their last continuous enrollment or current catalog year requirements at Yavapai College. Students must meet the credits in residence requirement.
5. Complete a minimum of 15 semester hours in residence for an associate degree program.

- If a certificate program requires 12-29 semester hours, a minimum of half the total hours must be completed in residence.
 - If a certificate program requires 11 or fewer credits, all of the semester hours must be completed in residence.
6. Prior Learning Assessment: maximum of 30 credit hours will be accepted.
 7. Remove any indebtedness to the College.

Bachelor's Degree Requirements

To obtain a Bachelor of Applied Science or Bachelor of Science degree from Yavapai College, a candidate must:

1. Satisfy any program-specific admission requirements.
2. Earn a cumulative grade-point average of 2.00 or better in all work completed at Yavapai College.
3. Successfully complete all courses required in one of the degree or certificate programs offered by Yavapai College.
 - Program requirements may change between the time of the student's admission and the time of graduation.
 - A student in continuous enrollment at Yavapai College may elect to graduate by satisfying program requirements as listed at the time of admission, at the time of graduation, or at any time during the last period of continuous attendance. Continuous enrollment means enrollment in the regular session (fall/spring or spring/fall) of each academic year.
 - If a course required for a degree or certificate has been deleted from the catalog, a comparable course will be substituted for the deleted course. Other substitutions are generally not permitted. However, a student who believes circumstances warrant special consideration may petition to the supervising dean.
4. Earn a grade of "C" or higher in a course for it to apply toward a Yavapai College degree or certificate.
 - A maximum of 12 credit hours of "S" credit from 100- & 200- level courses may be applied toward lower division degree requirements.
 - A maximum of 12 credit hours of "S" credit from 300- & 400-level courses may be applied toward upper division degree requirements.
 - A maximum of 12 credit hours of Independent Study courses may be applied toward any degree program.
 - Special interest and developmental education courses (courses numbered below 100) will not be applied toward degrees and certificates.
5. Students may fulfill degree requirements after leaving Yavapai College by transferring back applicable credits earned at regionally accredited institutions of higher education. Students must adhere to the catalog requirements of their program of study during their last continuous enrollment or current catalog year requirements at Yavapai College. Students must meet the credits in residence requirement.
6. Meet minimum credits in residence requirement (credits at Yavapai College, final grade of C or better in 100-level or higher classes):
 - Bachelor of Applied Science degree - minimum of 24 credit hours in residence
 - Bachelor of Science degree - minimum of 30 credit hours in residence
7. Prior Learning Assessment maximum credit hours allowed:
 - Bachelor of Applied Science degree - maximum of 45 credit hours
 - Bachelor of Science degree - maximum of 60 credit hours
8. Remove any indebtedness to the College.

Location of Degree Programs

Yavapai College offers courses required for degrees and certificates in selected locations. The college does not guarantee that all courses for a degree or certificate will be offered at all locations. Please review the degree or certificate program information or a current class schedule for the location information.

Graduation with Honors

A student who is awarded a degree and who meets the following requirements shows as conferred "with Honors" on the official transcript and on the diploma.

Associate Degree: completed 30 credit hours of 100-level or above at Yavapai College graded A-F with a cumulative GPA of 3.50 or higher.

Bachelor of Applied Science Degree: completed 45 credit hours of 100-level or above at Yavapai College graded A-F with a cumulative GPA of 3.50 or higher.

Bachelor's Degree: completed 60 semester hours of 100-level or above, graded A-F, at Yavapai College with a cumulative GPA of 3.50 or higher.

Multiple Degrees

A student who has already earned an associate degree or bachelor degree at Yavapai College may earn a subsequent degree according to the following provisions:

1. General education requirements specified for each degree must be completed.
2. All major and related degree requirements specified in any subsequent degree must be completed. If a specified course has already been applied to another degree or certificate program, that course *competency* may be applied to a subsequent degree program.
3. Course substitutions approved for one degree program do not automatically apply to a subsequent degree program.
4. A minimum of 15 additional credit hours of major and related requirements, not applied to the first degree, must be completed at Yavapai College for a second Associate Degree; a minimum of 30 additional credit hours of major and related requirement must be completed at Yavapai College for a second Bachelor Degree. These credit hours will be in addition to any general education requirements needed to complete the subsequent degree.
5. An Associate of General Studies degree will not be awarded simultaneously with, or subsequent to, the awarding of any other associate degree. Other degrees may be earned concurrently as long as all of the requirements for each degree are met.

A subsequent degree must identify a specific area of study and be directed by an approved educational plan. Requirements for a subsequent degree program must be completed in accordance with the catalog in effect at the time the multiple degree proposal is approved. Students must make this request with an Academic Advisor.

Continuous Enrollment

A semester in which a degree or certificate seeking student earns course credit will be counted toward continuous enrollment. Non-credit courses, audited courses, failed courses, or courses from which the student is withdrawn do not count toward the determination of continuous enrollment for catalog purposes.

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

Programs Requiring Selective Admission

Requirements for Admission to the Aerospace Science AAS - Airplane Operations Concentration

An application packet is available by contacting Anjanette Temple by phone at 928-776-2014 or emailing Anjanette.Temple@yc.edu. Admission requirements include a government issued photo ID and a copy of your FAA 2nd class medical card. Visit www.yc.edu/aviation for more information.

Requirements for Admission to the Gunsmithing Program

An application packet and additional information is available by contacting Anjanette Temple by phone at 928-776-2014 or emailing gunsmithing@yc.edu. Admission requirements include a valid driver's license and a concealed carry permit or current Federal background check. Visit www.yc.edu/gunsmithing for more information.

Requirements for Admission to the Freeport-McMoRan Mining Program

Students must be at least 18 years of age and must attend the Mining Preview Day held in February annually at Yavapai College. Students accepted into the program must interview with Freeport-McMoRan and be hired as an employee, pass a drug and alcohol test and physical examination, and complete a security background check. An information packet is available from the CTEC Campus by calling 928-717-7107 or 928-776-2002.

Requirements for Admission to the AAS in Nursing

Admission to the program occurs in the Fall and in the Spring semesters. Students must have an Arizona Department of Public Safety Fingerprint Clearance Card; immunizations as outlined in application; pre-requisites completed; and must pass a standardized Pre-Admission Exam. Additional information and an application packet are available online at www.yc.edu/nursing.

Pre-application entry requirements:

- Current Arizona certification as a CNA, LNA or successful completion of AHS 114, AHS 114C, and AHS 114L (or equivalent) within three years of the application deadline.
- Current pre-nursing workshop attendance certificate (valid within 12 months of the application deadline).

Requirements for Admission to the Bachelor of Science in Nursing (RN - BSN)

Admission to the program requires successful completion of an associate degree nursing program at a regionally accredited institution validated by transcript(s) and possessing an active, unencumbered RN license.

Requirements for Admission to the Nursing Assistant Certificate Program

There are special admission requirements for the Nursing Assistant Program that must be completed before receiving the Program Director's approval to register for the courses. These include a completed program application with proof of criminal background, health, and drug screenings. Must be at least 16 years old.

Requirements for Admission to the Paramedicine Program

Information regarding admission to the Paramedicine program is available at the Emergency Medical Services Department's website, www.yc.edu/ems. Interested students begin by filling out an application form. Once accepted into the program, additional information regarding specific documents required and or needed for program admission will be given to each student during a required paramedic orientation. Before applying, one must have a current EMT or AEMT certification card. For more information, please contact ems@yc.edu

Requirements for Admission to the Practical Nursing Fast Track Certificate Program

Prior to program application, the applicant must have an active Arizona certification or licensure as a CNA or LNA, or MMP, with one year of full-time or two years of part-time recent work experience; a successful score on ATI TEAS entrance exam; and high-school diploma or GED. It is recommended that students work closely with their advisor to ensure all application requirements are fully met. The application can be found at the Allied Health website: www.yc.edu/alliedhealth

Requirements for Admission to the Practical Nursing Transition Certificate Program

There are special admission requirements for the Practical Nursing Transition Certificate, including admission to the Nursing program and successful completion of NSG 151, NSG 152, NSG 153, NSG 154, NSG 155 and BIO 205

Requirements for Admission to the Radiologic Technology Program

An information packet is available from the Academic Advising Center, or online at: www.yc.edu/radiology.

Requirements for Admission to the Women's Health Imaging Program

For an application packet and detailed program information, visit www.yc.edu/radiology.

General Education

General Education is the core and foundation of the American educational experience, defining a set of values, skills and ideas that give a sense of coherence and connectedness to the learning process. Yavapai College recognizes that general education is essential for personal and intellectual growth, an effective and innovative workforce, and a successful and vibrant civic society. Yavapai College's General Education program is designed to encourage curiosity and an active interest in the world; practical, disciplined thinking; the development of personal and civic values; and a willingness to acknowledge and appreciate diverse cultural and historical perspectives.

YC's General Education program aligns with the Arizona General Education Curriculum (AGEC). Depending on their academic and career goals, students may be required to complete the AGEC certificate.

Arizona General Education Curriculum (AGEC) Transfer Agreement

YC's General Education program contains courses that are aligned with the categories in the statewide AGEC. The AGEC is an integral part of a state-wide system designed to ensure that students graduating from any Arizona community college with the intention of transferring to a state university will have experience in and familiarity with the ideas, values, and practices of the different disciplines which make up a liberal arts education.

All public universities and community colleges in Arizona have agreed to the AGEC, a general education core that requires students to complete a certain number of credits in the following categories: Written and Oral Communication, Quantitative Reasoning, Arts and Humanities, Social and Behavioral Sciences, Institutions of the Americas, and Natural Sciences.

This agreement ensures that the completion of the Arizona General Education Curriculum (AGEC) Certificate at Yavapai College will allow students to transfer lower division general education courses to any of the Arizona public universities without losing credits. If the student does not complete the AGEC Certificate at Yavapai College, the same transfer status may not be granted by an Arizona public university as those who have completed the certificate. Failing to complete the AGEC Certificate will result in having courses evaluated on a course-by-course basis by the transfer university. **Courses applied to the Arizona General Education Curriculum (AGEC) Certificate may not be taken for Satisfactory/Unsatisfactory (S/U) grading.**

To further assist students in their transfer goals, the following Associate's degrees include the 32-35 semester hour AGEC block:

- Associate of Arts
- Associate of Arts in Elementary Education
- Associate of Arts in Fine Arts
- Associate of Business
- Associate of Science

Students also have the option to complete the AGEC as part of the requirements for the Associate of General Education (AGS).

Some majors, particularly in the professional fields, have specific prerequisites and/or program requirements that will not transfer within the general education program described in this section. Students should check with an advisor to confirm the status of such a major program. Since university requirements can change from year-to-year, it is advisable to maintain regular contact with an academic advisor.

In some cases, a specific degree program may require the student to select particular courses, rather than to select freely from the list of approved General Education courses. The student should follow requirements of their specific degree program to ensure graduation and transfer of credits. Students are encouraged to meet regularly with an academic advisor to build an educational plan. Approved General Education courses are listed below, in their respective categories.

General Education Categories & Courses

General Education courses generally require critical reading and thoughtful writing. Students with college-level reading and writing skills have the foundation necessary for success. Approved General Education courses are listed below in their respective categories.

- Written Communication Requirement
 - ENG 101 College Composition I **Credits: 3**
 - OR ENG 101A - College Composition I with Writing Skills Review **Credits: 3**
 - **OR** ENG 103 College Composition I Honors **Credits: 3**
- **AND**
 - ENG 102 College Composition II **Credits: 3**
 - **OR** ENG 104 College Composition II Honors **Credits: 3**
- **Oral Communication Requirement**

Select from the following courses to fulfill the requirements of the Oral Communication category.

 - ASL 101 - Beginning American Sign Language I **Credits: 4**
 - ASL 102 - Beginning American Sign Language II **Credits: 4**
 - ASL 201 - Intermediate American Sign Language I **Credits: 4**
 - ASL 202 - Intermediate American Sign Language II **Credits: 4**
 - COM 100 - Introduction to Human Communication **Credits: 3**
 - COM 131 - Fundamentals of Speech Communication **Credits: 3**
 - COM 134 - Interpersonal Communication **Credits: 3**
 - MGT 233 - Business Communication **Credits: 3**
 - SPA 101 - Beginning Spanish I **Credits: 4**
- Quantitative Reasoning Requirement

Select from the following courses to fulfill the requirements of the Mathematics component of this degree.

 - ECN 232 - Business Statistical Analysis **Credits: 3**
 - MAT 141 - College Mathematics with Review **Credits: 4**
 - MAT 142 - College Mathematics **Credits: 3**
 - MAT 152 - College Algebra **Credits: 3**
 - MAT 167 - Elementary Statistics **Credits: 3**
 - MAT 182 - Precalculus (Algebra) **Credits: 3**
 - MAT 183 - Precalculus (Trigonometry) **Credits: 2**
 - MAT 212 - Topics in Calculus **Credits: 3**
 - MAT 220 - Calculus and Analytic Geometry I with Review **Credits: 5**
 - MAT 221 - Calculus and Analytic Geometry I **Credits: 4**
 - MAT 230 - Calculus and Analytic Geometry II **Credits: 5**
 - MAT 241 - Calculus III **Credits: 4**
 - MAT 262 - Elementary Differential Equations **Credits: 3**
 - PSY 230 - Introduction to Statistics in the Social and Behavioral Sciences. **Credits: 3**
 - SOC 230 - Introduction to Statistics in the Social and Behavioral Sciences **Credits: 3**
- Natural Sciences Requirement

Select from the following courses to fulfill the requirements of the Natural Sciences component of this degree.

 - AGS 103 - Plant Biology **Credits: 4**
 - BIO 100 - Biology Concepts **Credits: 4¹**

- BIO 103 - Plant Biology **Credits: 4**
- BIO 105 - Environmental Biology **Credits: 4**
- BIO 156 - Human Biology for Allied Health **Credits: 4¹**
- BIO 160 - Intro to Human Anatomy and Physiology **Credits: 4**
- BIO 181 - General Biology I **Credits: 4**
- BIO 182 - General Biology II **Credits: 4**
- BIO 201 - Human Anatomy and Physiology I **Credits: 4**
- BIO 202 - Human Anatomy and Physiology II **Credits: 4**
- BIO 205 - Microbiology **Credits: 4**
- CHM 130 - Fundamental Chemistry **Credits: 4**
- CHM 151 - General Chemistry I **Credits: 4**
- CHM 152 - General Chemistry II **Credits: 4**
- GEO 103 - Introduction to Physical Geography **Credits: 4**
- GEO 212 - Introduction to Meteorology **Credits: 4**
- GLG 101 - Introduction to Geology I **Credits: 4**
- GLG 102 - Introduction to Geology II **Credits: 4**
- GLG 110 - Environmental Geology **Credits: 4**
- PHY 100 - Introduction to Astronomy **Credits: 4**
- PHY 111 - General Physics I **Credits: 4**
- PHY 112 - General Physics II **Credits: 4**
- PHY 150 - Physics for Scientists and Engineers I **Credits: 5**
- PHY 151 - Physics for Scientists and Engineers II **Credits: 5**

¹Duplicate credit for BIO 100 and BIO 156 will not be awarded.

- **Arts and Humanities Requirement**

Select from the following courses to fulfill the requirements of the Arts & Humanities category.

- ART 100 - Art Appreciation **Credits: 3**
- ART 112 - Two-Dimensional Design **Credits: 3**
- ART 113 - Three-Dimensional Design **Credits: 3**
- ART 200 - Art History: Paleolithic Period through the Late Middle Ages **Credits: 3**
- ART 201 - Art History: Pre-Renaissance through the 21st Century **Credits: 3**
- ENG 185 - Sports in Literature and Media **Credits: 3**
- ENG 210 - Introduction to Rhetoric **Credits: 3**
- ENG 211 - British Literature: Beginning to 18th Century **Credits: 3**
- ENG 212 - British Literature 1798 to Present **Credits: 3**
- ENG 217 - Major Issues in World Literature **Credits: 3**
- ENG 220 - Introduction to Language and Culture **Credits: 3**
- ENG 230 - Introduction to Literature **Credits: 3**
- ENG 237 - Women in Literature **Credits: 3**
- ENG 242 - Introduction to Shakespeare **Credits: 3**
- ENG 270 - Introduction to Fiction Writing **Credits: 3**
- ENG 271 - Introduction to Poetry **Credits: 3**
- ENG 272 - Introduction to Creative Nonfiction **Credits: 3**
- HIS 104 - World History I: Early Civilizations to Globalization **Credits: 3**
- HIS 105 - World History II: Globalization to the Present **Credits: 3**
- HUM 101 - Introduction to Popular Culture **Credits: 3**
- HUM 202 - Introduction to Mythology **Credits: 3**
- HUM 205 - Science, Culture and Technology **Credits: 3**
- HUM 241 - Humanities I **Credits: 3**
- HUM 242 - Humanities II **Credits: 3**

- HUM 243 - World Cinema **Credits: 3**
- HUM 248 - Introduction to Folklore **Credits: 3**
- HUM 260 - Intercultural Perspectives **Credits: 3**
- MUS 145 - Music of World Cultures **Credits: 3**
- MUS 240 - Music Appreciation **Credits: 3**
- PHI 101 - Introduction to Philosophy **Credits: 3**
- PHI 103 - Introduction to Formal Logic **Credits: 3**
- PHI 105 - Introduction to Ethics **Credits: 3**
- PHI 110 - Critical Thinking in the Digital Age **Credits: 3**
- PHI 122 - Science and Religion **Credits: 3**
- PHI 204 - Medical Ethics **Credits: 3**
- PHI 210 - Environmental Ethics **Credits: 3**
- PHI 215 - Philosophy and Film **Credits: 3**
- PHI 220 - Happiness and the Meaning of Life **Credits: 3**
- PHI 232 - Business Ethics **Credits: 3**
- PHI 233 - Philosophy of Religion: East and West **Credits: 3**
- PHI 238 - Philosophy and Literature **Credits: 3**
- PHI 244 - Existentialism **Credits: 3**
- REL 101 - Introduction to World Religions **Credits: 3**
- REL 200 - Asian Mysticism **Credits: 3**
- REL 203 - Native Religions of the World **Credits: 3**
- REL 205 - Life, Sex, and Death **Credits: 3**
- REL 207 - Death and Dying **Credits: 3**
- REL 261 - Buddhism **Credits: 3**
- REL 270 - Christianity **Credits: 3**
- REL 273 - Judaism **Credits: 3**
- SPA 102 - Beginning Spanish II **Credits: 4**
- SPA 135 - Introduction to Spanish Literature **Credits: 3**
- SPA 201 - Intermediate Spanish I **Credits: 4**
- SPA 202 - Intermediate Spanish II **Credits: 4**
- SPA 245 - Hispanic Heritage in the Southwest: Culture and Language **Credits: 3**
- THR 135 - Introduction to the Theater **Credits: 3**

- **Social Behavioral Sciences Requirement**

Select from the following courses to fulfill the requirements of the Social and Behavioral Sciences component of this degree.

- AJS 123 - Ethics and Criminal Justice **Credits: 3**
- ANT 101 - Stones, Bones, and Human Origins **Credits: 3**
- ANT 102 - Introduction to Cultural Anthropology **Credits: 3**
- ANT 104 - Buried Cities and Lost Tribes **Credits: 3**
- ANT 214 - Magic, Witchcraft and Healing: The Supernatural in Cross-Cultural Perspective **Credits: 3**
- ANT 231 - Southwestern Archeology **Credits: 3**
- CHP 230 - Leadership Development Studies **Credits: 3**
- ECE 234 - Child Development **Credits: 3**
- ECN 110 - Economics of Sports **Credits: 3**
- EDU 200 - Introduction to Education **Credits: 3**
- EXW 152 - Personal Health and Wellness **Credits: 3**
- GEO 101 - World Geography West **Credits: 3**
- GEO 102 - World Geography East **Credits: 3**
- GEO 105 - Introduction to Cultural Geography **Credits: 3**

- NTR 145 - Food and Culture **Credits: 3**
- POS 100 - Introduction to Political Science **Credits: 3**
- POS 120 - World Politics **Credits: 3**
- PSY 101 - Introductory Psychology **Credits: 3**
- PSY 234 - Child Development **Credits: 3**
- PSY 245 - Human Growth and Development **Credits: 3**
- PSY 277 - Human Sexuality **Credits: 3**
- SOC 101 - Introduction to Sociology **Credits: 3**
- SOC 140 - Sociology of Relationships and Family **Credits: 3**
- SOC 142 - Race and Ethnic Relations **Credits: 3**
- SOC 212 - Gender and Society **Credits: 3**
- SOC 220 - Introduction to Social Work **Credits: 3**
- SOC 250 - Social Problems **Credits: 3**

- **Institutions in the Americas Requirement**

Select from the following courses to fulfill the requirements of the Institutions in the Americas category.

- AJS 290 - Constitutional Law: Civil Liberties and Civil Rights **Credits: 3**
- ANT 232 - Indians of the Southwest **Credits: 3**
- ECN 235 - Principles of Economics-Macro **Credits: 3**
- EDU 210 - Cultural Diversity in Education **Credits: 3**
- ENG 240 - American Literature to 1865 **Credits: 3**
- ENG 241 - American Literature 1865 to Present **Credits: 3**
- ENG 245 - Ethnic Literature of the Southwest **Credits: 3**
- FMA 150 - History of American Cinema **Credits: 3**
- HIS 131 - United States History I: Colonization to the Civil War **Credits: 3**
- HIS 132 - United States History II: Reconstruction to the Present **Credits: 3**
- HUM 236 - American Arts and Ideas **Credits: 3**
- LAW 290 - Constitutional Law: Civil Liberties and Civil Rights **Credits: 3**
- POS 110 - American National Government **Credits: 3**

Degrees & Certificates by Program Type

Bachelor's Degrees

- Bachelor of Applied Science in Business
- Bachelor of Science in Business
- Bachelor of Science in Computer Science
- Bachelor of Science in Nursing

Associate Degrees

- Associate of Arts
- Associate of Arts in Elementary Education
- Associate of Arts in Fine Arts
- Associate of Business
- Associate of General Studies
- Associate of Science

Arizona General Education Curriculum Certificate

- Arizona General Education Curriculum (AGEC)

Associate of Applied Science Degrees

- Accounting - AAS
- Administration of Justice - AAS
- Advanced Manufacturing Technology - AAS
- Aerospace Science Airplane Operations AAS
- Agriculture Technology Management - AAS
- Applied Pre-Engineering - AAS
- Automotive Technology - AAS
- Computer Networking: Cybersecurity - AAS
- Computer Systems and Applications - AAS
- Diesel Technician - AAS
- Electrical & Instrumentation Technology - AAS
- Fire Science - AAS
- Graphic Design - AAS
- Gunsmithing - AAS
- Management - AAS
- Nursing - AAS
- Paralegal Studies - AAS
- Paramedicine - AAS
- Radiologic Technology - AAS
- Viticulture and Enology - AAS

Certificates

- 3-D Printing and Manufacturing Certificate
- Accounting Assistant Certificate
- Advanced Bookkeeping Certificate
- Agriculture Technology Management Certificate
- Air Traffic Control Academy Prep Certificate
- Animal Care and Management Certificate
- Auto Body Paint and Collision Technology Certificate

- Automated Industrial Technology Certificate
- Automotive Master Technician Certificate
- Automotive Technician (MLR) Certificate
- Basic Carpentry Certificate
- Basic Residential Trades Certificate
- Basic Tax Certificate
- Behavioral Health Technician Certificate
- Bone Densitometry Certificate
- Bookkeeping Certificate
- Brewing Technology Certificate
- Business Foundations Certificate
- Cisco Networking Specialist Certificate
- Commercial Driver Training Certificate
- Community Health/Critical Care Paramedic Certificate
- Computed Tomography Certificate
- Computer Networking Technician Certificate
- Computer Numerical Controlled (CNC) Machining Certificate
- Computer Programming Certificate
- Culinary Arts Fundamentals Certificate
- Cybersecurity Specialist Certificate
- Cybersecurity Technician Certificate
- Diesel Technician Certificate
- Early Childhood Education Advanced Certificate
- Early Childhood Education Basic Certificate
- Electric Utility Lineworker Certificate
- Electrical Instrumentation Technician Certificate
- Electronics - Analog Electronics Certificate
- Electronics - Digital Electronics Certificate
- Electronics - Industrial Electronics Certificate
- Electronics Technology Certificate
- Emergency Medical Technician Certificate
- Enology Certificate
- Fire Service - Advanced Firefighter Certificate
- Fire Service Community Risk Reduction Certificate
- Fire Service Driver/Operator Certificate
- Fire Service Company Officer Certificate
- Fitness Trainer/Instructor Certificate
- Fundamentals of Agriculture Science Technology Certificate
- Graphic Design Technician Certificate
- Gunsmithing - Advanced Certificate
- Gunsmithing Certificate
- HVAC Installation & Maintenance Technician Certificate
- Justice Studies Certificate
- Law Enforcement and Corrections Certificate
- Legal Office Clerk Certificate
- Legal Paraprofessional Certificate
- Limited X-Ray Machine Operator Certificate
- Limited X-Ray Transition Certificate
- Magnetic Resonance Certificate
- Management Certificate

- Management - Entrepreneurship Principles and Practice Certificate
- Management - Foundations of Leadership Certificate
- Management - Strategic Leadership Certificate
- Media and Extended Realities Certificate
- Media Editing and Post-Production Certificate
- Media Production Certificate
- Medical Assistant Certificate
- Medical Office Assistant Certificate
- Medical Records Technician Certificate
- Nursing Assistant Certificate
- Paramedicine Certificate
- Phlebotomy Technician Certificate
- Plumbing Technician Certificate
- Practical Nursing Fast Track Certificate
- Practical Nursing Transition Certificate
- Production Horticulture Certificate
- Residential Electrical Technician Certificate
- Script Supervisor Certificate
- Technical Theater in Stagecraft Certificate
- Unmanned Aircraft Systems Certificate
- Victim Advocacy Certificate
- Video Game Developer Certificate
- Viticulture Advanced Certificate
- Viticulture Fundamentals Certificate
- Welding - Gas Metal Arc Welding Certificate
- Welding - Gas Tungsten Arc Welding Certificate
- Welding - Pipe Welding Certificate
- Welding - Structural Welding Certificate
- Women's Health Imaging Certificate
- Writing for the Screen Certificate

Note: *The following programs are no longer being offered as of the end of the 2024-25 catalog year. If you are enrolled in these programs in a previous catalog year, please work with an academic advisor to complete the program:*

- Aerospace Science AAS, Technical Aviation Concentration
- Aerospace Science AAS, Unmanned Aircraft Systems Operator Concentration
- Arizona General Education Curriculum (AGEC-A)
- Arizona General Education Curriculum (AGEC-B)
- Arizona General Education Curriculum (AGEC-S)
- Business Office Professional - AAS
- Assisted Living Facility Caregiver Certificate
- Baking and Pastry Certificate
- Business Office - Basic Certificate
- Business Office - Professional Certificate

Degrees & Certificates

Associate Degrees

Associate of Arts

Credit Hours Required: 60

The Associate of Arts (AA) degree is often focused on liberal arts, humanities, or social and behavioral science disciplines. It provides a foundational education in a specific discipline such as English, History, Psychology, or Communication, and includes courses specific to a student's chosen field of study.

The Associate of Arts degree requires completion of 60 credit hours. This degree is designed to enable a student to transfer to a baccalaureate-granting institution. Students following this degree program will complete university-parallel requirements in general education that will fulfill all lower division general education requirements at the Arizona universities. In addition, students will complete courses to fulfill lower division major and elective requirements in their program of study. Regular advisement is important to build an educational plan and ensure transferability of general education, elective, and major courses.

Students preparing to transfer to a baccalaureate degree program should contact an academic advisor in the major field of study at the transfer institution in addition to meeting regularly with an academic advisor at Yavapai College. Students may also wish to consult with a faculty member in their major field of study at both YC and their transfer institution.

Note: *The Arizona General Education Curriculum (AGEC) is embedded in the Associate of Arts degree. Upon completion of all 32-35 credit hours of the AGEC with a grade of "C" or higher, the student will receive recognition of completion on the transcript and guaranteed transferability of the AGEC upon admission to one of the state universities in Arizona.*

General Education Requirements (AGEC) (32-35 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities² **Credits:** 6
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3
- Options³ **Credits:** 4-7, as needed to align for transfer:
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*
- ³ *Limit one course per category*

Major and Elective Studies (25-28 credits)

- Communication⁴ **Credits:** 3
- Major/Elective courses as needed for transfer⁵ **Credits:** 22-25
 - Recommend five (5) 200 level courses as required for major

- Select courses according to your transfer goal or intended major to meet the 60 credit minimum. It is recommended that students choose from the following courses when completing this requirement: ACC, AGE, AGS, AJS (except AJS 292), ANT, ART, ASL, BIO, BHS, BSA, CHM, CHP, COM, CSA, CSC, DAN*, ECE, ECN, EDU, EGR, ENG, EXW, FMA, GEO, GLG, HIS, HUM, LDR, MAT (except MAT 100), MGT, MKT, MUS, NSG, NTR, PHE*, PHI, PHY, POS, PSY, REC*, REL, SOC, SPA, STU, THR, and VGD. *DAN, PHE and REC are limited to 4 activity-based credit hours each.

In addition to completing AGECE requirements, students should carefully choose courses that align with their transfer major and institution. AZTransfer Major Guides link associate's degrees to their related bachelor's degrees for majors that are offered by two or more of Arizona's public universities.

Notes:

- ⁴ Could be satisfied as part of AGECE.
- ⁵ Students may also wish to consult with a faculty member in their major field of study at both YC and their transfer institution.

Transfer Resources

The following tools are provided to assist students who are planning to transfer to Arizona Universities.

- Majors & Degrees Guide - AZTransfer
 - Major guides link associate's degrees to their related bachelor's degrees for majors that are offered by two or more of Arizona's public universities.
- Course Equivalency Guide - AZTransfer
 - The Course Equivalency Guide (CEG) shows students how community college courses transfer to Arizona State University, Northern Arizona University, and University of Arizona. This guide can assist you when choosing your major and elective studies.
- ASU Transfer Admission Guarantee (TAG)
 - The Transfer Admission Guarantee, or TAG, helps you plan and complete your Arizona community college coursework to meet the lower-division course requirements for your ASU major. When you complete the TAG, you'll be on track and prepared for success in earning your bachelor's degree.
- NAU Jacks Path
 - Jacks Path allows you see the courses you can take at Yavapai College, how your credits transfer to NAU, your progress toward completing your NAU degree, and what you'll take at NAU to earn your bachelor's degree.
- UA Bridge Program
 - The UA Bridge program is a partnership between several Arizona community colleges and the University of Arizona that provides a clear path to pursuing your UA bachelor's degree.

Program Outcomes

Upon successful completion of the Associate of Arts degree, the learner will be able to:

1. Demonstrate effective written, oral, or visual communication for specific audiences in the context of the field of study.
2. Use field of study frameworks to investigate issues and/or solve problems.
3. Apply scientific concepts and methodologies within the field of study.
4. Interpret quantitative information and/or utilize mathematical concepts and techniques.
5. Examine how diverse perspectives impact the human experience within a field of study.

Associate of Arts in Elementary Education

Credit Hours Required: 61-62

The vision for the Teacher Preparation Program at Yavapai College is one of a quality program that adapts to the dynamic needs of students, children, their families and the community.

The Elementary Education Program serves:

1. Students interested in pursuing careers in K-8 education.
2. Students who transfer to four-year degree programs in Elementary Education.
3. In-service teachers seeking to improve their teaching skills through additional coursework and/or professional development activities.

The Associate of Arts in Elementary Education degree requires completion of 61-62 credit hours. This degree is designed for students interested in elementary education who are preparing to transfer to one of the Arizona public universities to complete a baccalaureate program and qualify for an Arizona teaching certificate.

Students preparing to transfer to an upper-division baccalaureate degree program should contact an advisor in the major field of study at the transfer institution in addition to meeting regularly with a faculty advisor and/or academic advisor at Yavapai College.

Regular advisement is important to build an educational plan and ensure transferability of general education, elective, and major courses.

Notes:

- *The Arizona General Education Curriculum (AGEC) is embedded in the Associate of Arts in Elementary Education degree. Upon completion of all 34-35 credit hours of the AGEC with a grade of "C" or higher, the student will receive recognition of completion on the transcript and guaranteed transferability of the AGEC upon admission to one of the state universities in Arizona.*
- *This program can be completed entirely online. Not all general education options or major and elective studies are offered online, however there will be a variety of online classes from which to choose in order to meet the requirements.*

General Education Requirements (AGEC) (34-35 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities² **Credits:** 6
- ECE 234 - Child Development **Credits:** 3 (Social and Behavioral Sciences)
- Social and Behavioral Sciences² **Credits:** 3
- AJS 290 - Constitutional Law: Civil Liberties and Civil Rights **Credits:** 3 (Institutions in the Americas)
- Options³ **Credits:** 6-7, as needed to align for transfer:
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*
- ³ *Limit one course per category*

Major and Elective Studies (27 credits)

- EDU 180 - Educational Technology: Teaching and Learning in a Digital Age **Credits: 3**
- EDU 200 - Introduction to Education **Credits: 3**
- EDU 210 - Cultural Diversity in Education **Credits: 3**
- EDU 222 - Introduction to the Exceptional Learner **Credits: 3**
- EDU 230 - Language and Literacy Experiences **Credits: 3**
- EDU 240 - Family and Community Partnerships **Credits: 3**
- EDU 242 - The Science of Reading and Structured Literacy Instruction in the K-5 Classroom **Credits: 3**
- MAT 156 - Mathematics for Elementary Teachers I **Credits: 3**
- MAT 157 - Mathematics for Elementary Teachers II **Credits: 3**

Program Outcomes

Upon successful completion of the Associate of Arts in Elementary Education Degree program, the learner will be able to:

1. Create a personal philosophy of education related it to a future career in education.
2. Present developmentally appropriate classroom activities intended to achieve specific student learning outcomes.
3. Analyze teaching styles as they relate to student learning styles.
4. Compare and contrast the concepts of multicultural education and its implementation in the public school classroom.
5. Examine how the concepts of equity and equal educational opportunity have evolved into educational policy.
6. Examine society's historical identification and treatment of exceptional children and youth.
7. Argue the relative effects of parents, siblings, peers, teachers, the community, and culture on child development.
8. Utilize technology to complete teaching tasks more efficiently.

Associate of Arts in Fine Arts

Credit Hours Required: 60-63

The Associate of Arts in Fine Arts degree requires completion of 60-63 credit hours depending on the concentration selected. This degree is designed to enable a student to transfer to a baccalaureate-granting institution. Students following this degree program will complete university-parallel requirements in general education that will fulfill all lower division general education requirements at the Arizona universities. The AAFA degree will also allow students to declare a concentration in Visual Arts, Music, or Performing Arts.

Students preparing to transfer to an upper-division baccalaureate degree program should contact an advisor in the major field of study at the transfer institution in addition to meeting regularly with a faculty advisor and/or an academic advisor at Yavapai College.

Regular advisement is important to build an educational plan and ensure transferability of general education, major, and elective courses.

Select one Concentration to view the requirements:

- AAFA - Music Concentration
- AAFA - Performing Arts Concentration
- AAFA - Visual Arts Concentration

AAFA - Music Concentration

General Education Requirements (AGEC) (35 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- MUS 240 - Music Appreciation **Credits:** 3 (Arts and Humanities)
- MUS 145 - Music of World Cultures **Credits:** 3 (Arts and Humanities)
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3
- Options³ **Credits:** 7, as needed to align for transfer:
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ Must be in composition (ENG 101 and ENG 102 or equivalents)
- ² Recommend that students select from two different prefixes
- ³ Limit one course per category

Major and Elective Studies (28 credits)

Music Core Requirements (24 credits)

- MUS 103 - Piano Class I **Credits:** 1
- MUS 104 - Piano Class II **Credits:** 1
- MUS 131 - Basic Integrated Theory I **Credits:** 4
- MUS 132 - Basic Integrated Theory II **Credits:** 4
- MUS 151 - Applied Music and/or MUS 151A and/or MUS 151B **Credits:** 4
- MUS 203 - Piano Class III **Credits:** 1
- MUS 204 - Piano Class IV **Credits:** 1

- MUS 231 - Advanced Integrated Theory I **Credits: 4**
- MUS 232 - Advanced Integrated Theory II **Credits: 4**

Music Electives: Select 4 credit hours

- MUS 101 - Private Music **Credits: 1**
- MUS 105 - Voice Class I **Credits: 1**
- MUS 110 - Concert Band **Credits: 1**
- MUS 111 - Symphonic Band **Credits: 1**
- MUS 113 - Big Band I **Credits: 1**
- MUS 114 - Big Band II **Credits: 1**
- MUS 115 - Instrumental Ensemble **Credits: 1**
- MUS 116 - Jazz Combo **Credits: 1**
- MUS 117 - Symphony Orchestra **Credits: 1**
- MUS 129 - Music Fundamentals **Credits: 2**
- MUS 222 - Chamber Singers **Credits: 1**
- MUS 223 - Vocal Ensemble **Credits: 1**
- MUS 224 - Master Chorale **Credits: 1**
- MUS 225 - Community Chorale **Credits: 1**
- MUS 227 - Women's Chorale **Credits: 1**
- MUS 296 - Internship: Music **Credits: 3**

Program Outcomes

Upon successful completion of the Associate of Arts in Fine Arts Degree - Music Concentration, the learner will be able to:

1. Perform at a required level of artistry and technical proficiency on an instrument.
2. Develop and perform a required level of music analytical competence.
3. Exhibit a required level of aural recognition.
4. Explain the historical and cultural development of music throughout the ages.
5. Communicate informed personal reactions to recorded and live music.

AAFA - Performing Arts Concentration

General Education Requirements (AGEC) (35 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits: 6**
- Quantitative Reasoning **Credits: 3**
- Natural Sciences **Credits: 4**
- MUS 240 - Music Appreciation (Arts and Humanities) **Credits: 3**
- THR 135 - Introduction to the Theater (Arts and Humanities) **Credits: 3**
- Social and Behavioral Sciences² **Credits: 6**
- Institutions in the Americas **Credits: 3**
- Options³ **Credits: 7**, as needed to align for transfer:
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ Must be in composition (ENG 101 and ENG 102 or equivalents)
- ² Recommend that students select from two different prefixes
- ³ Limit one course per category

Major and Elective Studies (25 credits)

Performing Arts Core Requirements (11 credits)

- DAN 110 - Ballet I **Credits: 2**
- MUS 134 - Singing for the Actor **Credits: 3**
- THR 131 - Acting I **Credits: 3**
- THR 141 - Stagecraft **Credits: 3**

Performing Arts Electives (14 credits)

Select 14 credit hours from the following courses:

- DAN 114 - Jazz I **Credits: 2**
- DAN 115 - Tap I **Credits: 2**
- DAN 120 - Ballet II **Credits: 2**
- DAN 151 - Applied Dance **Credits: 2**
- THR 132 - Acting II **Credits: 3**
- THR 133 - Musical Theater I **Credits: 3**
- THR 150 - Theater Rehearsal and Performance **Credits: 1 – 3**
 - THR 150 *may be taken for a total of 3 credit hours.*
- THR 160 - Lighting for Stage and Media **Credits: 3**
- THR 161 - Sound Design for Stage and Media **Credits: 3**
- THR 162 - Stagecraft Rigging and Safety **Credits: 3**
- THR 164 - Theater Set and Props Building **Credits: 3**

Program Outcomes

Upon successful completion of the Associate of Arts in Fine Arts Degree - Performing Arts Concentration, the learner will be able to:

1. Perform with an acquired level of analytical and artistic competencies.
2. Acquire performance skills and expertise through participation in music, dance, and theatrical classes and productions.
3. Collaborate in professional production settings.
4. Analyze historical and cultural influences on developments of music, dance, and theatrical productions.

AAFA - Visual Arts Concentration

General Education Requirements (AGEC) (35 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits: 6**
- Quantitative Reasoning **Credits: 3**
- Natural Sciences **Credits: 4**
- ART 200 - Art History: Paleolithic Period through the Late Middle Ages **Credits: 3** (Arts and Humanities)
- ART 201 - Art History: Pre-Renaissance through the 21st Century **Credits: 3** (Arts and Humanities)
- Social and Behavioral Sciences² **Credits: 6**
- Institutions in the Americas **Credits: 3**
- Options³ **Credits: 7**, as needed to align for transfer:
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*
- ³ *Limit one course per category*

Major and Elective Studies (27 credits)

Visual Arts Core Requirements (18 credits)

- ART 110 - Drawing I **Credits:** 3
- ART 111 - Drawing II **Credits:** 3
- ART 112 - Two-Dimensional Design **Credits:** 3
- ART 113 - Three-Dimensional Design **Credits:** 3
- ART 114 - Color **Credits:** 3
- ART 117 - Four-Dimensional Design **Credits:** 3

Visual Arts Electives: Select 9 credit hours

Note: *The transferability of ART 137, ART 140, ART 144, and ART 154 should be confirmed with the transfer institution. In the final term students are encouraged to select electives from their intended BFA studio concentration.*

- ART 120 - Ceramics I **Credits:** 3
- ART 121 - Ceramics II **Credits:** 3
- ART 137 - Adobe Photoshop I **Credits:** 3
- ART 139 - Fundamentals of Video Editing **Credits:** 3
- ART 140 - Jewelry I **Credits:** 3
- ART 144 - Furniture and Woodworking I **Credits:** 3
- ART 154 - Digital Photography I **Credits:** 3
- ART 160 - Printmaking I **Credits:** 3
- ART 182 - Welded Metal Sculpture I **Credits:** 3
- ART 183 - Welded Metal Sculpture II **Credits:** 3
- ART 190 - Oil/Acrylic Painting I **Credits:** 3
- ART 191 - Oil/Acrylic Painting II **Credits:** 3
- ART 194 - Watercolor I **Credits:** 3
- ART 210 - Life Drawing I **Credits:** 3

Program Outcomes

Upon successful completion of the Associate of Arts in Fine Arts Degree - Visual Arts Concentration, the learner will be able to:

1. Articulate the creative process and influence of project development.
2. Use safe practices with appropriate equipment, tools and materials.
3. Exercise quality craftsmanship.
4. Utilize the formal elements and principles of design.
5. Analyze the formal elements and principles of design.
6. Synthesize the formal elements and principles of design.
7. Identify historical and contemporary examples of the Fine Arts and Crafts.
8. Create a fine arts portfolio.

Associate of Business

Credit Hours Required: 61

The Associate of Business degree requires completion of 61 credit hours. Although students often can enter a career field upon completion of the Associate of Business, this degree plan is primarily designed to provide the first two years of coursework to prepare students for transfer into a related upper-division baccalaureate degree program.

Notes:

- *Students preparing to pursue a baccalaureate degree program at Yavapai College or another institution should meet regularly with an academic advisor at Yavapai College.*
- *This program can be completed entirely online. Not all general education options or major and elective studies are offered online, however there will be a variety of online classes from which to choose in order to meet the requirements.*

General Education Requirements (AGEC) (34 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- MAT 141 - College Mathematics with Review or higher **Credits:** 3 (Quantitative Reasoning)²
- Natural Sciences **Credits:** 4
- Arts and Humanities³ **Credits:** 6
- Social and Behavioral Sciences³ **Credits:** 6
- ECN 235 - Principles of Economics-Macro **Credits:** 3 (Institutions in the Americas)
- MGT 233 - Business Communication **Credits:** 3 (Oral Communication)
- Options **Credits:** 3, as needed to align for transfer:
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Students planning to transfer to a university should complete MAT 152 or higher*
- ³ *Recommend that students select from two different prefixes*

Program Requirements (18 credits)

- ACC 131 - Principles of Accounting I **Credits:** 3
- ACC 132 - Principles of Accounting II **Credits:** 3
- BSA 131 - Introduction to Business **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3
- ECN 232 - Business Statistical Analysis **Credits:** 3
- ECN 236 - Principles of Economics-Micro **Credits:** 3

Program Electives (9 credits)

Select 3 of the following courses:

- BSA 237 - Legal Environment of Business **Credits:** 3
- BSA 238 - Advanced Professional Productivity Solutions **Credits:** 3
- CSA 110 - Introduction to Computer Information Systems **Credits:** 3
 - **Students planning to transfer to ASU, NAU, or UofA should select this course as a program elective.*
- ECN 110 - Economics of Sports **Credits:** 3
- MAT 172 - Finite Mathematics **Credits:** 3
- MAT 212 - Topics in Calculus **Credits:** 3
 - **Students planning to transfer to ASU, NAU, or UofA should select this course as a program elective*

Program Outcomes

Upon successful completion of the Associate of Business degree, the learner will be able to:

1. Analyze financial information.
2. Use financial data for business decision-making.
3. Apply decision support tools to business decision-making.
4. Demonstrate professional business communication skills.
5. Evaluate business issues, including ethical implications.

Associate of General Studies

Credit Hours Required: 60

The Associate of General Studies (AGS) degree is meant to be flexible and interdisciplinary, allowing students to tailor their education to their interests and career goals. It is a mix of general education and elective courses designed for students who want to gain a broad education that can be applied to various career paths or personal development. Students who are exploring options related to occupational goals that do not result in an Associate of Applied Science (AAS) or whose career, major, or transfer intent is uncertain, may elect to pursue this degree.

This degree allows students to uniquely design an associate's degree with more flexibility in the selection of courses. These courses may be taken from a variety of subject areas with no specific area of emphasis. **Students are encouraged to develop their degree plan in conjunction with an academic advisor.**

Note: *Students electing to transfer to one of the Arizona public universities with an AGS degree will have their coursework evaluated on a course-by-course basis by the university to which they transfer unless they complete the Arizona General Education Curriculum (AGEC) certificate to ensure the acceptance of their general education coursework as a block transfer of general education requirements. For this reason, students who are considering transfer should either complete the AGEC or choose an Associate's degree program designed for transfer.*

General Education Requirements (28 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities² **Credits:** 6
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*

Major and Elective Studies (32 credits)

- Communication **Credits:** 3
- Major/Elective courses³ **Credits:** 29

Note: ³*Though the AGEC is not required for this degree, it is recommended that students who are considering transfer complete the AGEC or choose a transfer degree that includes the AGEC. Complete the AGEC by completing 4-7 additional credits in Oral Communication, Natural Sciences, Arts and Humanities, or Social and Behavioral Sciences. A maximum of one course may be taken in each area.*

Program Outcomes

Upon successful completion of the Associate of General Studies degree, the learner will be able to:

1. Demonstrate effective written, oral, or visual communication for specific audiences in the context of the field of study.
2. Use field of study frameworks to investigate issues and/or solve problems.
3. Apply scientific concepts and methodologies within the field of study.
4. Interpret quantitative information and/or utilize mathematical concepts and techniques.
5. Examine how diverse perspectives impact the human experience within a field of study.

Associate of Science

Credit Hours Required: 60

The Associate of Science (AS) degree is the appropriate degree plan for students who major in fields with more stringent mathematics and mathematics-based science requirements.

The Associate of Science degree requires completion of a minimum of 60 credit hours. This degree plan is primarily designed to provide the first two years of coursework to prepare students for transfer to a baccalaureate-granting institution. Students following this degree program will complete university-parallel requirements in general education that will fulfill all lower division general education requirements at the Arizona universities. In addition, students will complete courses to fulfill lower division major and elective requirements in their program of study. Regular advisement is important to build an educational plan and ensure transferability of general education, elective, and major courses.

Students preparing to transfer to a baccalaureate degree program should contact an academic advisor in the major field of study at the transfer institution in addition to meeting regularly with an academic advisor at Yavapai College. Students may also wish to consult with a faculty member in their major field of study at both YC and their transfer institution.

Note: *The Arizona General Education Curriculum (AGEC) is embedded in the Associate of Science degree. Upon completion of all 32-25 credit hours of the AGEC with a grade of "C" or higher, the student will receive recognition of completion on the transcript and guaranteed transferability of the AGEC upon admission to one of the state universities in Arizona.*

General Education Requirements (AGEC) (32 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- MAT 182 - Precalculus (Algebra) **Credits:** 3 (Quantitative Reasoning)
- Natural Sciences **Credits:** 8
- Arts and Humanities² **Credits:** 6
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*

Major and Elective Studies (28 credits)

- MAT 183 - Precalculus (Trigonometry) **Credits:** 2
- Communication **Credits:** 3
- Major/Elective courses in Math³, Science, or Languages* as needed for transfer **Credits:** 23
 - Select courses according to your transfer goal or intended major (including second language courses*) to meet the 60 credit minimum. It is recommended that students choose from the following courses when completing this requirement: AGS 103 or BIO 103, BIO 105, BIO 181, BIO 182, BIO 201, BIO 202, BIO 205, CHM 151, CHM 152, EGR 102, GEO 103, GEO 212, GLG 101, GLG 102, MAT 167, MAT 182 and MAT 183, MAT 212, MAT 220, MAT 221, MAT 230, MAT 241, MAT 262, PHY 111, PHY 112, PHY 150, PHY 151, ASL 101*, ASL 102*, ASL 201*, ASL 202*, SPA 101*, SPA 102*, SPA 201*, SPA 202*.

In addition to completing AGEC requirements, students should carefully choose courses that align with their transfer major and institution. AZTransfer Major Guides link associate's degrees to their related bachelor's degrees for majors that are offered by two or more of Arizona's public universities.

Note: ³ *Many majors in mathematics and the sciences require MAT 220 or MAT 221.*

Transfer Resources

The following tools are provided to assist students who are planning to transfer to Arizona Universities.

- Majors & Degrees Guide - AZTransfer
 - Major guides link associate's degrees to their related bachelor's degrees for majors that are offered by two or more of Arizona's public universities.
- Course Equivalency Guide - AZTransfer
 - The Course Equivalency Guide (CEG) shows students how community college courses transfer to Arizona State University, Northern Arizona University, and University of Arizona. This guide can assist you when choosing your major and elective studies.
- ASU Transfer Admission Guarantee (TAG)
 - The Transfer Admission Guarantee, or TAG, helps you plan and complete your Arizona community college coursework to meet the lower-division course requirements for your ASU major. When you complete the TAG, you'll be on track and prepared for success in earning your bachelor's degree.
- NAU Jacks Path
 - Jacks Path allows you see the courses you can take at Yavapai College, how your credits transfer to NAU, your progress toward completing your NAU degree, and what you'll take at NAU to earn your bachelor's degree.
- UA Bridge Program
 - The UA Bridge program is a partnership between several Arizona community colleges and the University of Arizona that provides a clear path to pursuing your UA bachelor's degree.

Program Outcomes

Upon successful completion of the Associate of Science degree, the learner will be able to:

1. Demonstrate effective written, oral, or visual communication for specific audiences in the context of the field of study.
2. Use field of study frameworks to investigate issues and/or solve problems.
3. Apply scientific concepts and methodologies within the field of study.
4. Interpret quantitative information and/or utilize mathematical concepts and techniques.
5. Examine how diverse perspectives impact the human experience within a field of study.

Arizona General Education Curriculum Certificate

Arizona General Education Curriculum (AGEC)

Credit Hours Required: 32-35

The Arizona General Education Curriculum (AGEC) is designed to fulfill all lower division General Education requirements at the public universities in Arizona. In consultation with an advisor, students should carefully select courses that align with their major and intended transfer university.

Upon completion of all 32-35 credit hours of the AGEC with a grade of "C" or higher, the student will receive recognition of completion on their Yavapai College transcript. Arizona residents who complete an AGEC and who have a cumulative GPA of 2.50 or higher have assured admission upon application to one of the state universities in Arizona.

The AGEC also fulfills general education requirements for the Associate of Arts, Associate of Arts in Elementary Education, Associate of Arts in Fine Art, Associate of Business, and Associate of Science degrees at Yavapai College.

Notes:

- *Courses applied to the Arizona General Education Curriculum (AGEC) may not be taken for Satisfactory/Unsatisfactory (S/U) Grading.*
- *This program can be completed entirely online and/or in 8 week format. Not all general education options are offered online or in 8 week sessions; however there will be a variety of online and 8 week classes from which to choose in order to meet the requirements.*

General Education Requirements (AGEC) (32-35 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities² **Credits:** 6
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3
- Options³ **Credits:** 4-7, as needed to align for transfer:
 - Oral Communication⁴
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*
- ³ *Limit one course per category*
- ⁴ *Oral Communication is not required for an AGEC, but at least 3 credits from the Oral Communication list may be required for an Associate's degree*

Program Outcomes

Upon successful completion of the Arizona General Education Curriculum (AGEC) Certificate, the learner will be able to:

1. Demonstrate effective written, oral, or visual communication for specific audiences in the context of the field of study.
2. Use field of study frameworks to investigate issues and/or solve problems.
3. Apply scientific concepts and methodologies within the field of study.
4. Interpret quantitative information and/or utilize mathematical concepts and techniques.

5. Examine how diverse perspectives impact the human experience within a field of study.

Associate of Applied Science Degrees

Accounting - AAS

The Accounting degree program prepares students for employment in entry level positions in the accounting profession.

Credit Hours Required: 61

Notes:

- *Since this degree prepares students directly for employment, students interested in a transfer program in accounting should see an academic advisor for other educational options.*
- *This program can be completed entirely online. Not all general education options or program electives are offered online, however there will be a variety of online classes from which to choose in order to meet the requirements.*

AAS General Education Requirements (19 credits)

- Written Communication **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Science **Credits:** 6¹

Note: ¹Select from two different prefixes

Program Requirements (36 credits)

- ACC 115 - Basic Tax Planning **Credits:** 3
- ACC 117 - Advanced Tax Planning and Preparation **Credits:** 3
- ACC 121 - Introductory Accounting **Credits:** 3
- ACC 122 - Payroll Accounting **Credits:** 3
- ACC 131 - Principles of Accounting I **Credits:** 3
- ACC 132 - Principles of Accounting II **Credits:** 3
- ACC 160 - Computer Accounting with QuickBooks **Credits:** 3
- ACC 210 - Data Analytics for Accounting **Credits:** 3
- ACC 233 - Intermediate Accounting I **Credits:** 3
- ACC 234 - Intermediate Accounting II **Credits:** 3
- BSA 131 - Introduction to Business **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3

Program Electives (6 credits)

Select 6 credit hours from the following courses:

- ACC 296 - Internship: Accounting **Credits:** 3
- BSA 237 - Legal Environment of Business **Credits:** 3
- ECN 236 - Principles of Economics-Micro **Credits:** 3
- MGT 132 - Ethics in Business **Credits:** 3
- MGT 233 - Business Communication **Credits:** 3

Program Outcomes

Upon successful completion of the Accounting Degree program, the learner will be able to:

1. Perform financial accounting functions using proper format and procedure based on Generally Accepted Accounting Principles (GAAP) and the International Financial and Reporting Standards (IFRS).
2. Perform managerial accounting functions using proper format and procedure.
3. Prepare and interpret financial statements and reports for service, merchandising and manufacturing companies.
4. Prepare complex tax returns and communicate the effects of tax rules for individuals, partnerships and corporations.

5. Demonstrate professional business communication skills.
6. Use current technology and software applications to input, manage, interpret and communicate financial information.
7. Research and recommend resolution of business issues, including ethical implications of alternatives.

Administration of Justice - AAS

The Administration of Justice degree program is an interdisciplinary program of study which prepares students for a broad range of employment opportunities including law enforcement, corrections, probation/parole officer, and social services in the courts or community agencies.

In addition to preparing students for entry-level employment, this degree program is appropriate for individuals already employed in the justice field who are seeking skill upgrade and promotional opportunities, and individuals preparing to transfer to a four-year college/university with a major in Justice Studies.

Arizona State University, Arizona State University-West, Grand Canyon University, Northern Arizona University and the University of Arizona all offer baccalaureate degree programs in Justice Studies/Administration of Justice.

Credit Hours Required: 61

Note: *This program can be completed entirely online. Not all general education options or program electives are offered online, however there will be a variety of online classes from which to choose in order to meet the requirements.*

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- AJS 123 - Ethics and Criminal Justice (Social and Behavioral Sciences) **Credits:** 3
- Arts and Humanities **OR Social and Behavioral Sciences Credits:** 3

Program Requirements (30 credits)

- AJS 101 - Introduction to Administration of Justice **Credits:** 3
- AJS 109 - Substantive Criminal Law **Credits:** 3
- AJS 170 - Forensic Science **Credits:** 3
- AJS 200 - Current Issues in Criminal Justice **Credits:** 3
- AJS 225 - Criminology **Credits:** 3
- AJS 230 - The Police Function **Credits:** 3
- AJS 240 - The Correction Function **Credits:** 3
- AJS 260 - Procedural Criminal Law **Credits:** 3
- AJS 270 - Community Relations **Credits:** 3
- AJS 290 - Constitutional Law: Civil Liberties and Civil Rights **Credits:** 3

Program Electives (12 credits)

Select 12 credit hours from the following courses:

- AJS 103 - Public Safety Report Writing **Credits:** 3
- AJS 106 - Public Safety Communications **Credits:** 3
- AJS 192 - Serial Killers and Mass Murderers **Credits:** 3
- AJS 212 - Juvenile Justice Procedures **Credits:** 3
- AJS 226 - Victimology and Crisis Intervention **Credits:** 3
- AJS 252 - Homeland Security and Terrorism **Credits:** 3
- AJS 275 - Criminal Investigations **Credits:** 3
- AJS 278 - Neuroscience and the Law **Credits:** 3
- AJS 296 - Internship: Administration of Justice **Credits:** 3
- AJS 298 - Special Justice Topics: **Credits:** 3

Program Outcomes

Upon successful completion of the Administration of Justice Degree program, the learner will be able to:

1. Explain the historical development of American criminal law from its English common law roots to the present.

2. Analyze criminal conduct in the context of historical, social, political and legal developments.
3. Identify the organization and jurisdiction of local state and federal law enforcement, courts and correctional systems.
4. Describe the relationships between the three components of the criminal justice system.
5. Summarize the philosophy of legal sanctions and corrections and the historical development of theories of punishment and rehabilitation.
6. Analyze the intersection of law, morality and ethics in our modern society.
7. Summarize the modern scientific tools used in criminal investigation.
8. Analyze current issues and trends in crime rates, criminal behavior, and social trends as they impact the criminal justice process.
9. Identify and analyze specific problems which relate to police-community relations and seek possible solutions.
10. Identify and summarize the various theories of the causes of criminal behavior.
11. Analyze the role of the US Supreme Court in defining the Constitutional protections and procedural due process safeguards in the criminal justice system.
12. Describe the economic and psychological impact of crime on society.
13. Define investigation and describe the goals of criminal investigation.
14. Identify the key provisions of the Bill of Rights and the U.S. Constitution that pertain to civil liberties and civil rights, and explain various competing theories of constitutional interpretation and judicial review.

Advanced Manufacturing Technology - AAS

The Advanced Manufacturing degree is designed to prepare students to operate, maintain and repair a variety of automated manufacturing, assembly, and distribution systems and to incorporate innovative technologies to improve production from design to manufacturing stages.

Credit Hours Required: 63 (Mining: 76)

Note: Freeport McMoRan, Inc. sponsors a mining program designed to prepare students for direct employment in the mining industry. There are special admission requirements for the Mining Concentration of the Advanced Manufacturing Technology AAS. Contact 928.776.2002 for details.

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- BIO 105 - Environmental Biology (Physical and Biological Sciences) **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ Select from two different prefixes

Program Core Requirements (44 credits)

These core courses are required of all Advanced Manufacturing students.

- AGS 101 - Microcomputers in Agriculture **Credits:** 3
- **OR** CSA 126 - Microsoft Office for Windows **Credits:** 3
- AIT 105 - Modern Maintenance Operations **Credits:** 3
- AIT 110 - Mechanical Power Transmission Systems **Credits:** 3
- AIT 115 - Hydraulic Systems **Credits:** 3
- AIT 120 - Pneumatic Systems **Credits:** 3
- CNC 101 - CNC Machine Operator **Credits:** 2
- CNC 102 - CNC Machine Setup **Credits:** 2
- CNC 201 - Computer Aided Programming for CNC **Credits:** 3
- ELT 101 - Basic Electricity **Credits:** 4
- ELT 135 - Robot Operator **Credits:** 3
- ELT 165 - Programmable Logic Controllers **Credits:** 2
- IPT 261 - Machine Shop **Credits:** 3
- MET 116 - Rigging **Credits:** 1
- MET 200 - SolidWorks for Non-Engineers **Credits:** 3
- WLD 112 - Oxyacetylene Welding for Non-Welding Majors **Credits:** 2
- **OR** WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits:** 2
- WLD 250 - Welded Metal Fabrication **Credits:** 4

Mining Concentration (13 credits)

Freeport McMoRan mining students must complete the Program Requirements (above) and the following courses:

- IPT 295 - Apprenticeship: Industrial Plant **Credits:** 3
- **AND** IPT 295 - Apprenticeship: Industrial Plant **Credits:** 3
- **AND** IPT 295 - Apprenticeship: Industrial Plant **Credits:** 3
- **AND** IPT 295 - Apprenticeship: Industrial Plant **Credits:** 3
 - Note: IPT 295 must be taken four times for a total of 12 credit hours.
- MET 150 - Surface Mine Safety Training **Credits:** 1

Program Outcomes

Upon successful completion of the Advanced Manufacturing Technology degree program, the learner will be able to:

1. Safely utilize machine shop equipment.

2. Fabricate and repair industrial machinery components.
3. Repair hydraulic and pneumatic system components.
4. Troubleshoot valves and pumps.
5. Program and set up automated manufacturing equipment.
6. Design components and assemblies using industry-standard computer-aided design (CAD) and computer-aided manufacturing (CAM) software.
7. Demonstrate the use of slings, common rigging hardware, and safe loading practices.
8. Test electronic sensors, actuators, and motors.

Aerospace Science Airplane Operations AAS

The Aerospace Science AAS Degree program in Airplane Operations prepares students for careers in aviation as airplane pilots.

Credit Hours Required: 60-63

Note: *There are special admission requirements for the Aerospace Science Airplane Operations AAS. Application information is available from the Academic Advising Center. Call 928.776.2002 for details.*

This program is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- GEO 212 - Introduction to Meteorology (Physical and Biological Sciences) **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (41-44 credits)

- AVT 108 - Pre-Aviation Groundschool **Credits:** 3
- AVT 114 - Instrument Pilot Airplane Flight **Credits:** 3.5
- AVT 115 - Instrument Pilot Airplane Ground **Credits:** 4
- AVT 119 - Pre-Aviation Flight Simulation **Credits:** 2
- AVT 129 - Private Pilot Airplane Flight **Credits:** 3.5
- AVT 204 - Commercial Pilot Single-Engine Airplane Ground **Credits:** 2
- AVT 205 - Commercial Pilot Multi-Engine Airplane Ground **Credits:** 2
- AVT 214 - Instrument Pilot Flight Simulation **Credits:** 1
- AVT 215 - Flight Instructor Airplane Ground **Credits:** 2
- AVT 219 - Single Engine Commercial Flight II **Credits:** 3
- AVT 222 - Flight Instructor Airplane Flight **Credits:** 2.5
- AVT 223 - Commercial Pilot Single-Engine Airplane Flight I **Credits:** 3.5
- AVT 224 - Commercial Pilot Multi-Engine Airplane Flight **Credits:** 1.5
- AVT 225 - Flight Instructor Instrument Airplane Ground **Credits:** 2
- AVT 228 - Flight Instructor Instrument Airplane Flight **Credits:** 1.5
- AVT 260 - Fundamentals of Instruction **Credits:** 1

AND Select a minimum of 3-6 credit hours from the following courses:

- AVT 262 - Flight Endorsement **Credits:** 1-3
- UAS 100 - Introduction to UAS **Credits:** 3

Program Outcomes

Upon successful completion of the Aerospace Science Airplane Operations Degree program, the learner will be able to:

1. Fly or operationally control an aircraft under normal conditions.
2. Fly or operationally control an aircraft at night or under instrument meteorological conditions.
3. Fly or operationally control an aircraft under emergency conditions.
4. Meet industry requirements to enter the aviation career field flying or operationally controlling aircraft.
5. Make safe aeronautical decisions using scenarios and/or actual flying conditions.

Agriculture Technology Management - AAS

The Agriculture Technology Management program prepares students for entrepreneurship, employment, or advancement in a variety of agricultural fields including horticulture, aquaculture and fisheries, and animal care and management.

Credit Hours Required: 60

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- AGS 103 - Plant Biology **OR** BIO 103 - Plant Biology (Physical and Biological Sciences) **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (25 credits)

- AGS 101 - Microcomputers in Agriculture **Credits:** 3
- **OR** CSA 126 - Microsoft Office for Windows **Credits:** 3
- AGS 102 - Agribusiness Management **Credits:** 3
- AGS 105 - Soils **Credits:** 3
- AGS 107 - Entomology **Credits:** 3
- AGS 120 - Introduction to the Animal Industry **Credits:** 4
- AGS 157 - Community Supported Agriculture **Credits:** 3
- AGS 215 - Agricultural Mechanics **Credits:** 3
- AGS 274 - Water Management **Credits:** 3

Program Electives (16 credits)

Select 16 credit hours from the following courses:

- AGS 250 - Horticulture Fall Production **Credits:** 4
- AGS 252 - Horticulture Spring Production **Credits:** 4
- AGS 261 - Aquaculture Science **Credits:** 4
- AGS 264 - Aquaculture Management **Credits:** 4
- AGS 280 - Zoo and Domestic Animal Care **Credits:** 4
- AGS 282 - Zoo and Domestic Animal Behavior **Credits:** 4

Program Outcomes

Upon successful completion of the Agriculture Technology Management Degree program, the learner will be able to:

1. Manage an extensive agriculture facility.
2. Rear fish from egg to market.
3. Develop a water delivery and quality management system.
4. Propagate plants sexually and asexually.
5. Develop and implement an integrated pest management system.
6. Develop and implement a comprehensive management program for exotic and domestic animals.

Applied Pre-Engineering - AAS

The Associate of Applied Science Degree in Applied Pre-Engineering is designed to provide students with a working knowledge of engineering concepts and prepare them to transfer into a university engineering program.

Note: *Students can complete an AGECE while earning the AAS in Applied Pre-Engineering.*

Always work with your advisor to ensure that the general education courses selected will transfer to your chosen university.

Credit Hours Required: 61

General Education Requirements (AGECE) (35 credits)

- Written Communication¹ **Credits:** 6
- MAT 221 - Calculus and Analytic Geometry I **Credits:** 4 (Quantitative Reasoning)
- PHY 150 - Physics for Scientists and Engineers I **Credits:** 5 and PHY 151 - Physics for Scientists and Engineers II **Credits:** 5 (Natural Sciences)
- Arts and Humanities² **Credits:** 6
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*

Program Requirements (20 credits)

- CNC 101 - CNC Machine Operator **Credits:** 2
- CNC 201 - Computer Aided Programming for CNC **Credits:** 3
- EGR 102 - Introduction to Engineering **Credits:** 3
- EGR 110 - Introduction to Digital Design **Credits:** 4
- ELT 130 - Introduction to Robotics **Credits:** 3
- MAT 230 - Calculus and Analytic Geometry II **Credits:** 5

Program Electives (6 credits)

Work with your faculty advisor and transfer advisor to select the best electives for your chosen discipline and transfer university.

Select 6 credit hours from the following courses:

- CNC 102 - CNC Machine Setup **Credits:** 2
- CNC 202 - 3-D Programming and Rapid Prototyping for CNC **Credits:** 4
- EGR 180 - CAD (Computer Aided-Drawing) with SolidWorks **Credits:** 3
- EGR 210 - Introduction to Electrical Engineering **Credits:** 4
- MAT 182 - Precalculus (Algebra) **Credits:** 3
- MAT 183 - Precalculus (Trigonometry) **Credits:** 2
- MAT 241 - Calculus III **Credits:** 4
- MAT 262 - Elementary Differential Equations **Credits:** 3

Program Outcomes

Upon successful completion of the Applied Pre-Engineering Degree program, the learner will be able to:

1. Articulate basic mathematical, scientific and applicable engineering principles.
2. Solve problems using electronics, robotics and precision manufacturing software.
3. Utilize modern manufacturing techniques to solve problems for integrated systems.
4. Write documents that are audience specific and describe technical operations or scientific principles.
5. Work as members or leaders of a team to accomplish an objective.

Automotive Technology - AAS

The Automotive Technology degree program is designed for individuals preparing for positions utilizing a combination of automotive technology and business management skills including service managers, insurance adjusters, and small business owners. This degree program will prepare students for the National Automotive Service Excellence (ASE) certification examinations to become ASE Certified Automobile Technicians. ASE certification requires hands-on working experience as well as completion of written examinations. Two years of post high school educational training, such as that offered in this automotive degree program at Yavapai College, may be substituted for up to one year of the hands-on work experience requirement of the ASE certification.

Accreditation: This program is accredited by the Automotive Service Excellence Education Foundation (ASE).

Credit Hours Required: 62-63

AAS General Education Requirements (16 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **OR** Social and Behavioral Sciences **Credits:** 3

Program Requirements

- AUT 103 - Automotive/Diesel Preventative Maintenance **Credits:** 4
- AUT 109 - Auto/Diesel Electrical Systems **Credits:** 4
- AUT 122 - Automatic Transmissions and Transaxles **Credits:** 4
- AUT 123 - Automotive Brakes **Credits:** 4
- AUT 124 - Auto/Diesel Manual Drive Trains **Credits:** 4
- AUT 126 - Auto/Diesel Suspension and Steering **Credits:** 4
- AUT 128 - Auto/Diesel Heating and Air Conditioning **Credits:** 4
- AUT 153 - Auto Engine Repair **Credits:** 4
- AUT 230 - Advanced Light/Medium Duty Diesel Diagnosis 1500-4500 Series **Credits:** 4
- AUT 231 - Auto Engine Diagnostics **Credits:** 5

Program Electives

Select 2 courses from the following:

- IPT 261 - Machine Shop **Credits:** 3
- MTC 105 - Introduction to Motorcycle and UTV Technology **Credits:** 3
- MTC 215 - Motorcycle and UTV Service Procedures **Credits:** 3
- WLD 112 - Oxyacetylene Welding for Non-Welding Majors **OR** WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits:** 2

Program Outcomes

Upon successful completion of the Automotive Technology Degree program, the learner will be able to:

1. Identify the parts and rebuild a basic engine and a modified performance engine.
2. Explain and diagnose electrical circuits, electrical components, and computer related problems.
3. Rebuild an automatic transmission and transaxle manual transmission, and transaxle driveline and differential.
4. Replace steering and suspension components and align a front-end.
5. Diagnose and repair automotive air conditioning and heating systems.
6. Tune up, adjust and diagnose an internal combustion engine system.
7. Diagnose, remove, and replace an entire automotive brake system including ABS and traction control system.

Computer Networking: Cybersecurity - AAS

The Computer Networking: Cybersecurity AAS degree is designed to provide students with the necessary skills to gain employment as information technology professionals focusing on cybersecurity. Core courses focus on network configuration, routing and switching, and operating systems. In-depth studies include cybersecurity operations, network forensics, and penetration testing. Students interested in college transfer for bachelor's degrees in Cybersecurity or Technology Management should see an academic advisor.

Credit Hours Required: 63

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (44 credits)

- CNT 101 - Networking and Cybersecurity Fundamentals **Credits:** 4
- CNT 105 - Cybersecurity Principles **Credits:** 3
- CNT 110 - A+ Computer Technician Certification **Credits:** 4
- CNT 118 - Operating System Fundamentals **OR** CNT 120 - Introduction to Windows Server **Credits:** 3
- CNT 131 - Linux System Administration **Credits:** 3
- CNT 135 - Security+: Implementing and Maintaining Network Security **Credits:** 3
- CNT 140 - Cisco Routing and Switching I **Credits:** 4
- CNT 150 - Cisco Routing and Switching II **Credits:** 3
- CNT 190 - Programming and Scripting for Network Admins **Credits:** 3
- CNT 235 - Cybersecurity Operations **Credits:** 3
- CNT 250 - Securing Network Devices **Credits:** 3
- CNT 260 - Cybersecurity Forensics **Credits:** 3
- CNT 275 - Penetration Testing and Vulnerability Assessment **Credits:** 3
- CNT 293 - CNT Project: Cybersecurity **Credits:** 2

Program Outcomes

Upon successful completion of the Computer Networking: Cybersecurity Degree program, the learner will be able to:

1. Describe and configure the hardware and software used in a medium to large-sized computer network.
2. Describe the terms and technologies that comprise the field of cybersecurity, and implement strategies for managing an information security program.
3. Maintain and repair personal computers.
4. Perform administrative and troubleshooting tasks on operating systems.
5. Administer and secure the Linux operating system.
6. Describe network protocols and perform basic network device configuration.
7. Configure Cisco routing, switching, and wireless technologies.
8. Write and debug programs and scripts for application in a network environment.
9. Configure and implement network security.
10. Implement network security concepts and techniques in a security operations center.
11. Install, troubleshoot, and monitor a secure network to maintain integrity, confidentiality, and availability of data and devices.
12. Apply cybersecurity forensics techniques to network and computer systems.
13. Identify and exploit network vulnerabilities.
14. Analyze, design, implement, and present a cybersecurity project.

Computer Systems and Applications - AAS

The Computer Systems and Applications degree program prepares students for careers as software professionals and for advanced studies in Computer Science.

Students interested in a transfer program in Computer Science or Business Information Systems should see an academic advisor for an educational plan.

Credit Hours Required: 60

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3 ¹
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ²
 - PHI 105 - Introduction to Ethics
 - Choose from a prefix other than PHI for the remaining 3 credits.

Notes:

- ¹ MAT 152 or equivalent or higher, except MAT 156 or 157
- ² Select from two different prefixes

Program Requirements (32 credits)

- CNT 105 - Cybersecurity Principles **Credits:** 3
- CSA 107 - Technology Networking Tools (TNT) **Credits:** 1
- CSA 110 - Introduction to Computer Information Systems **Credits:** 3
- CSA 214 - Foundations of Data Science **Credits:** 3
- CSA 250 - Introduction to Artificial Intelligence **Credits:** 3
- CSA 281 - Systems Analysis and Design **Credits:** 3
- CSA 282 - Database Concepts **Credits:** 3
- CSA 294 - CSA Project **Credits:** 1-6
 - *Note: CSA 294 must be taken for a minimum of 1 credit hour.*
- CSC 105 - Introduction to Programming **Credits:** 3
- CSC 113 - Programming: Python **Credits:** 3
- CSC 125 - Programming: C# Fundamentals **Credits:** 3
- CSC 205 - Programming: JavaScript, HTML & CSS **Credits:** 3

Program Electives (9 credits)

Select a minimum of 9 credit hours from the following courses:

- CNT 101 - Networking and Cybersecurity Fundamentals **Credits:** 4
- CNT 110 - A+ Computer Technician Certification **Credits:** 4
- CNT 118 - Operating System Fundamentals **Credits:** 3
- CNT 135 - Security+: Implementing and Maintaining Network Security **Credits:** 3
- CSA 126 - Microsoft Office for Windows **Credits:** 3
- CSC 211 - Programming: PHP and MySQL **Credits:** 3
- CSC 220 - Programming: Java **Credits:** 3
- VGD 121 - Video Game Development for Game Engines **Credits:** 3
- VGD 171 - Video Game Development - Programming **Credits:** 3

Program Outcomes

Upon successful completion of the Computer Systems and Applications Degree program, the learner will be able to:

1. Adapt technological skills to meet a need within a business or occupational environment.
2. Communicate ideas in a collaborative environment during all stages of software development.

3. Develop technology skills to solve problems and increase productivity.
4. Identify ethical issues in the business and occupational environment.

Diesel Technician - AAS

The Diesel Technology AAS is designed for individuals to utilize a combination of diesel technology and business management skills to prepare for positions including: service managers, technicians, small business owners, and insurance adjusters. It prepares students to take the ASE examinations and become ASE certified technicians. This program offers two concentrations:

Diesel Technician Concentration - prepares the student to enter the diesel mechanics field as an entry-level apprentice diesel technician.

Mining Diesel Technician Concentration - Freeport McMoRan, Inc. sponsors a mining program which is designed to prepare students for direct employment in the mining industry.

Credit Hours Required: 67 (Mining Option: 77)

Note: *There are special admission requirements for the mining program concentration. Call 928.776.2002 for details.*

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- BIO 105 - Environmental Biology (Physical and Biological Sciences) **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (44 credits)

- AGS 101 - Microcomputers in Agriculture **Credits:** 3
- **OR** CSA 126 - Microsoft Office for Windows **Credits:** 3
- AIT 115 - Hydraulic Systems **Credits:** 3
- AUT 103 - Automotive/Diesel Preventative Maintenance **Credits:** 4
- AUT 108 - Diesel Engine Repair Technology **Credits:** 4
- AUT 109 - Auto/Diesel Electrical Systems **Credits:** 4
- AUT 124 - Auto/Diesel Manual Drive Trains **Credits:** 4
- AUT 128 - Auto/Diesel Heating and Air Conditioning **Credits:** 4
- AUT 135 - Diesel Braking Systems **Credits:** 4
- AUT 208 - Advanced Diesel Engine Repair **Credits:** 4
- AUT 225 - Diesel Engine Performance **Credits:** 4
- AUT 230 - Advanced Light/Medium Duty Diesel Diagnosis 1500-4500 Series **Credits:** 4
- WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits:** 2

Select one concentration below and complete the requirements.

Diesel Technician Concentration (4 credits)

- AUT 126 - Auto/Diesel Suspension and Steering **Credits:** 4

Mining Concentration (14 credits)

- AUT 295 - Apprenticeship: Diesel **Credits:** 3
- **AND** AUT 295 - Apprenticeship: Diesel **Credits:** 3
- **AND** AUT 295 - Apprenticeship: Diesel **Credits:** 3
- **AND** AUT 295 - Apprenticeship: Diesel **Credits:** 3
 - Note: *AUT 295 must be taken four times for a total of 12 credit hours.*
- MET 116 - Rigging **Credits:** 1
- MET 150 - Surface Mine Safety Training **Credits:** 1

Program Outcomes

Upon successful completion of the Diesel Technician Degree program, the learner will be able to:

1. Troubleshoot, repair, and replace diesel engines.
2. Troubleshoot, repair, and replace diesel fuel system components.
3. Troubleshoot, repair, and replace diesel electrical system components.
4. Perform basic service maintenance on diesel equipment.
5. Troubleshoot, repair, and replace drivetrains.
6. Analyze diesel computer controlled systems.

Electrical & Instrumentation Technology - AAS

The Electrical & Instrumentation Technology degree is designed to prepare students for positions in the installation, repair and maintenance of industrial and commercial electrical and electronic equipment. Program emphasizes component-level troubleshooting.

Credit Hours Required: 60-71

Mining Concentration - Note: *Freeport McMoRan, Inc. and Asarco sponsor mining programs designed to prepare students for direct employment in the mining industry. Admission to the Mining Concentration is restricted to Freeport McMoRan, Inc. student-employees (part-time employee; full-time student).*

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (34-36 credits)

- AGS 101 - Microcomputers in Agriculture or CSA 126 - Microsoft Office for Windows **Credits:** 3 or STU 100 - Computer Literacy **Credits:** 1
- AIT 115 - Hydraulic Systems **Credits:** 3
- AIT 120 - Pneumatic Systems **Credits:** 3
- ELT 111 - DC Electrical Systems **Credits:** 3
- ELT 112 - AC Electrical Systems **Credits:** 3
- ELT 126 - Solid State Devices **Credits:** 3
- ELT 162 - Microprocessors & Microcontrollers **Credits:** 2
- ELT 165 - Programmable Logic Controllers **Credits:** 2
- ELT 183 - Digital Circuits **Credits:** 3
- ELT 221 - Communication Systems and Circuits **Credits:** 3
- ELT 258 - Electronic Troubleshooting **Credits:** 2
- ELT 271 - Process Control Instrumentation **Credits:** 3
- ELT 272 - Motors and Motor Controls **Credits:** 3

Select one Concentration below and complete the requirements.

A. Electrical & Instrumentation Technology Concentration (5-7 credits)

Select 5-7 credit hours from the following courses:

- EGR 180 - CAD (Computer Aided-Drawing) with SolidWorks or MET 200 - SolidWorks for Non-Engineers **Credits:** 3
 - *Note: Duplicate credit for EGR 180 and MET 200 will not be awarded.*
- ELT 108 - 3-D Printer Operation and Maintenance or TDP 108 - 3-D Printer Operation and Maintenance **Credits:** 3
 - *Note: Duplicate credit for ELT 108 and TDP 108 will not be awarded.*
- ELT 115 - Conduits and Raceways **Credits:** 1
- ELT 130 - Introduction to Robotics or ELT 135 - Robot Operator **Credits:** 3
 - *Note: Duplicate credit for ELT 130 and ELT 135 will not be awarded.*
- ELT 140 - Robot Vision **Credits:** 3
- ELT 141 - Electrical Apparatus **Credits:** 4
- ELT 198 - Electronics Topics **Credits:** 1-3
- ELT 220 - National Electrical Codes **Credits:** 3
- ELT 272 - Motors and Motor Controls **Credits:** 3
- ELT 279 - Tools for Electronic Troubleshooting **Credits:** 2

- ELT 296 - Internship: Electrical Technician **Credits: 3**
 - *Note: ELT 296 may be taken for a total of 6 credit hours.*
- MET 116 - Rigging **Credits: 1**
- WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits: 2**

B. Mining Concentration (16 credits)

Note: Freeport McMoRan, Inc. sponsors mining programs designed to prepare students for direct employment in the mining industry. There are special admission requirements for these programs. Call 928. 776. 2002 for details **You must be accepted into the Freeport McMoRan Mining program in order to select this concentration.**

- ELT 295 - Apprenticeship: Electrical Instrumentation **Credits: 3**
- **AND** ELT 295 - Apprenticeship: Electrical Instrumentation **Credits: 3**
- **AND** ELT 295 - Apprenticeship: Electrical Instrumentation **Credits: 3**
- **AND** ELT 295 - Apprenticeship: Electrical Instrumentation **Credits: 3**
 - *Note: ELT 295 must be taken four times for a total of 12 credit hours.*
- MET 116 - Rigging **Credits: 1**
- MET 150 - Surface Mine Safety Training **Credits: 1**
- WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits: 2**

Program Outcomes

Upon successful completion of the Electrical and Instrumentation Technology Degree program, the learner will be able to:

1. Troubleshoot direct and alternating current circuits.
2. Troubleshoot digital, microprocessor and programmable controller-based circuits.
3. Troubleshoot solid-state circuits.
4. Troubleshoot process control instrumentation and motor control circuits.
5. Troubleshoot communication circuits.
6. Troubleshoot pre-bugged equipment including symptom recognition, fault isolation and repair.
7. Troubleshoot pneumatic and hydraulic systems.
8. Demonstrate computer literacy skills including how to create and modify spreadsheets and documents using common software platforms.

Additional outcomes for the Mining Concentration:

1. Demonstrate the use of slings, common rigging hardware and safe loading practices.
2. Demonstrate the U.S. Mine Safety and Health Administration requirements for new miner training.
3. Operate SMAW and GMAW to industry requirements.

Fire Science - AAS

The Fire Science degree program is an interdisciplinary program of study which prepares students for a broad range of employment opportunities including Firefighter, Hazardous Materials Technician, Fire Marshal/Inspector, Fire Investigator, and Fire Service Supervisor/Manager.

In addition to preparing students for employment, this degree program is appropriate for individuals already employed in the Public Safety field who are seeking skill upgrade and promotional opportunities, and individuals preparing to transfer to a four-year college/university. The Fire Science degree will allow students to declare a concentration in Operations or Administration. This degree outline provides the list of core and concentration requirements.

Students interested in a transfer program in fire science should see an academic advisor for an educational plan.

Note: *Students preparing for transfer must complete College Composition I & II.*

Credit Hours Required: 62-71

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Core Requirements (21 credits)

- FSC 100 - Principles of Emergency Services **Credits:** 3
- FSC 102 - Principles of Fire and Emergency Services Safety & Survival **Credits:** 3
- FSC 135 - Fire Prevention **Credits:** 3
- FSC 210 - Advanced Fire Behavior and Combustion **Credits:** 3
- FSC 235 - Fire Protection Systems **Credits:** 3
- FSC 236 - Occupational Safety and Health for Emergency Services **Credits:** 3
- FSC 241 - Building Construction for Fire Protection **Credits:** 3

Select one Concentration below and complete the requirements

A. Fire Service Operations Concentration (31 credits)

- EMS 143 - Emergency Medical Technician Practicum **Credits:** 2
- EMS 144 - Emergency Medical Technician **Credits:** 10
- EMS 144L - Emergency Medical Technician Lab **Credits:** 4
- FSC 104 - Hazardous Materials First Responder Operations **Credits:** 3
- FSC 105 - Firefighter I & II Certification Academy **Credits:** 12

B. Fire Service Administration Concentration (22 credits)

- FSC 137 - Fire Protection Hydraulics and Water Supply **Credits:** 3
- FSC 225 - Legal Aspects of Emergency Services **Credits:** 4
- FSC 234 - Fire Investigation **Credits:** 3
- FSC 238 - Strategy and Tactics **Credits:** 3
- FSC 239 - Fire Department Company Officer **Credits:** 3
- FSC 240 - Principles of Fire and Emergency Service Administration **Credits:** 3
- UAS 100 - Introduction to UAS **Credits:** 3

Program Outcomes

Upon successful completion of the Fire Science degree program, the learner will be able to:

1. Use basic terms and concepts associated with the chemistry and dynamics of fire.
2. Describe the function and purpose of fire protection systems.
3. Prescribe safety procedures for personnel operating on the fire ground.
4. Determine factors and principles related to fire resistance, building codes and fire suppression issues.
5. Explain issues related to fire prevention and the components and steps of inspection and enforcement.
6. Explain issues related to fire prevention and the components and steps of inspection and enforcement.
7. Develop conditioning strategies, lifelong fitness, nutritional guidelines, and prepare for pre-employment agility tests.
8. Apply tactics and strategies for fire suppression.

Option A:

1. Demonstrate the appropriate and safe use of personal firefighting equipment and fire apparatus.
2. Demonstrate physical tasks, proper tool selection, and knowledge of operating procedures in accordance with the standards of the profession.
3. Perform various drags, lifts, carries, wall breaching, narrow-space manipulation and hoisting techniques directly related to firefighter safety and self-survival.
4. Identify various hazardous materials and their potential dangers.
5. Perform CPR for victims of all ages and demographics.
6. Provide first aid for victims of all ages and demographics.
7. Describe principles and techniques of emergency medical care as performed by the EMT-Basic in accordance with national and state curriculum.

Option B:

1. Describe principles and characteristics of hydraulics and operate fire hydraulic pumps currently in use in the fire service.
2. Incorporate and manage cost containment, budgeting, data analysis, personnel evaluation, community planning, and departmental and public organization.
3. Explain the basic elements of fire dynamics, construction, and fire protection systems and how they affect origin and cause determination.
4. Describe current UAS capabilities and applications related to fire service.
5. Direct firefighting operations to achieve life safety, property conservation, and environmental protection.
6. Lead functions and processes as the emergency scene commander.
7. Discuss the legal issues and concerns affecting emergency services.

Graphic Design - AAS

The Graphic Design degree program prepares students for employment in entry-level positions in design, front-end web development, and commercial art fields. This degree program prepares students with the visual design and technology skills required for employment in today's job market.

Credit Hours Required: 64

AAS General Education Requirements (19 credits)

- First-Year Composition **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (42 credits)

- ART 110 - Drawing I **Credits:** 3
- ART 112 - Two-Dimensional Design **Credits:** 3
- ART 114 - Color **Credits:** 3
- ART 130 - Web Design **Credits:** 3
- ART 131 - Graphic Design I **Credits:** 4
- ART 132 - Graphic Design II **Credits:** 4
- ART 137 - Adobe Photoshop I **Credits:** 3
- ART 200 - Art History: Paleolithic Period through the Late Middle Ages **OR** ART 201 - Art History: Pre-Renaissance through the 21st Century **Credits:** 3
- ART 230 - Graphic Design III **Credits:** 4
- ART 231 - Digital Illustration **Credits:** 4
- ART 232 - Portfolio Development **Credits:** 2
- ART 233 - User Experience Design **Credits:** 3
- ART 234 - Advanced Graphic Design Projects **Credits:** 3

Program Electives (3 credits)

Select 3 credit hours from the following courses:

- ART 113 - Three-Dimensional Design **Credits:** 3
- ART 117 - Four-Dimensional Design **Credits:** 3
- ART 139 - Fundamentals of Video Editing **Credits:** 3
- ART 296 - Internship: Art **Credits:** 3

Program Outcomes

Upon successful completion of the Graphic Design Degree program, the learner will be able to:

1. Work independently or as part of a team to successfully complete graphic design projects.
2. Develop creative solutions to visual problems.
3. Utilize typography in design solutions.
4. Employ industry standard software.
5. Identify, analyze, synthesize and communicate design principles.
6. Produce and maintain a professional portfolio.
7. Articulate traditional and nontraditional art examples and how those examples affect popular visual literacy.

Gunsmithing - AAS

The Gunsmithing degree program prepares students for employment in entry-level positions in firearm and metal industries.

Credit Hours Required: 75

Note: *Since there is a special admission process for this program, prospective students should contact the Advising Center or visit our website at <https://www.yc.edu/v6/schools/cate/gunsmithing.html> for detailed information.*

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (48 credits)

- GST 101 - Gunsmithing Fundamentals **Credits:** 12
- GST 151 - Novice Gunsmithing **Credits:** 12
- GST 201 - Intermediate Gunsmithing **Credits:** 12
- GST 251 - Advanced Gunsmithing **Credits:** 12

Program Electives (8 credits)

Select one course from the following each semester for a total minimum of 8 credits:

- GST 191 - Basic Engraving **Credits:** 3
- GST 192 - Advanced Engraving **Credits:** 3
- GST 195A - Gunsmithing Practicum **Credits:** 2
- GST 195B - Gunsmithing Practicum **Credits:** 2
- GST 291 - Professional Engraving **Credits:** 3
- GST 295A - Advanced Gunsmithing Practicum **Credits:** 2
- GST 295B - Advanced Gunsmithing Practicum **Credits:** 2
- CNC 101 - CNC Machine Operator **Credits:** 2
- CNC 102 - CNC Machine Setup **Credits:** 2
- WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits:** 2

Program Outcomes

Upon successful completion of the Gunsmithing Degree program, the learner will be able to:

1. Safely operate hand and machine tools common to the gunsmithing trade.
2. Use micrometers, indicators, verniers and various gauges for measuring.
3. Develop ballistic data and document research assignments.
4. Disassemble and prepare firearms for metal finishing and reassemble.
5. Identify, disassemble, and assemble different rifle operating systems.
6. Prepare glass bed, install accessories, and apply finish.
7. Identify different top break shotgun operating systems.
8. Identify, disassemble, and assemble different handgun operating systems.
9. Install rifle barrels using proven methods to enhance accuracy.
10. Manufacture specialty accessories encountered in the firearms industry.
11. Communicate professionally with customers and vendors.
12. Develop a business plan suitable for a small business loan application.
13. Develop an accurate price list for performing technical services.

Management - AAS

The Associate of Applied Science (AAS) degree in Management provides management training to prepare students to apply competencies needed for successful performance in management occupations. The program is designed for students seeking to update or develop essential management skills for the workplace. This degree prepares students for employment directly in the workforce as managers, assistant managers, supervisors, team leaders, and other related positions. Embedded in this degree are the Foundations of Leadership Certificate and Management Certificate with Organizational and Retail Management concentration programs. The AAS Management transfers into the Bachelor of Science in Business degree.

Credit Hours Required: 61

Notes:

- *Students interested in pursuing the Bachelor of Science in Business after the Management AAS should complete the following electives: ACC 131, BSA 131, BSA228, ECN 232, and ECN 236. Refer to the Bachelor of Science in Business for detailed program requirements. Students are encouraged to see an academic advisor to assist with selecting the most appropriate courses.*
- *This program can be completed entirely online.*

AAS General Education Requirements (19 credits)

- Written Communication **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (27 credits)

- LDR 111 - Leadership & Innovation **Credits:** 1
- LDR 112 - Leadership & Collaboration **Credits:** 1
- LDR 113 - Leadership & Communication **Credits:** 1
- MGT 120 - Supervision Techniques **Credits:** 3
- MGT 132 - Ethics in Business **Credits:** 3 **OR** PHI 232 - Business Ethics **Credits:** 3
 - **Students transferring to the Bachelor of Science in Business or Bachelor of Applied Science in Business should take PHI 232 to fulfill the Arts and Humanities requirement.*
- MGT 140 - Organizational Behavior **Credits:** 3
- MGT 220 - Principles of Management **Credits:** 3
- MGT 223 - Human Resource Management **Credits:** 3
- MGT 229 - Strategic Management **Credits:** 3
- MGT 233 - Business Communication **Credits:** 3
- MKT 240 - Principles of Marketing **Credits:** 3

Program Electives (15 credits)

Select a minimum of 15 credit hours from the following courses:

- ACC 131 - Principles of Accounting I **Credits:** 3
- BSA 102 - Career Search and Success: Skills for Entering and Succeeding in the Workplace **Credits:** 1
- BSA 131 - Introduction to Business **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3
- BSA 237 - Legal Environment of Business **Credits:** 3
- BSA 238 - Advanced Professional Productivity Solutions **Credits:** 3
- BSA 296 - Internship: Business Administration **Credits:** 3
- ECN 232 - Business Statistical Analysis **Credits:** 3
- ECN 236 - Principles of Economics-Micro **Credits:** 3

- LDR 112 - Leadership & Collaboration **Credits: 1**
- LDR 113 - Leadership & Communication **Credits: 1**
- LDR 201 - Leadership Essentials **Credits: 3**
- LDR 202 - Strategic Leadership **Credits: 3**
- LDR 203 - Organizational Leadership **Credits: 3**
- MGT 183 - Managing Business Finances **Credits: 3**
- MGT 188 - Competitor Differentiation **Credits: 3**
- MGT 281 - High Performance Management **Credits: 3**
- MGT 283 - Operations Management **Credits: 3**
- MGT 285 - Growing your Business **Credits: 3**
- MGT 288 - Business Plan Development **Credits: 3**
- MKT 231 - Social Media Marketing **Credits: 3**
- MKT 280 - Marketing Tactics and Techniques **Credits: 3**

Program Outcomes

Upon successful completion of the Management AAS Degree program, the learner will be able to:

1. Analyze and synthesize information through critical thinking.
2. Apply written, oral and interpersonal skills in business settings.
3. Use the management principles of planning, organizing, leading and controlling to solve common management issues.
4. Identify ethical issues and apply the values of professional responsibility.

Nursing - AAS

The Associate of Applied Science in Nursing degree prepares students for entry-level positions as registered nurses. The program is approved by the Arizona State Board of Nursing (AZBN) with continuing accreditation by the Accreditation Commission for Education in Nursing (ACEN).

Note: *Students interested in the LPN-RN Advanced Placement or LPN step-out should contact an advisor or visit the Nursing Application Information Guide on www.yc.edu/nursing.*

Application for Admission to the Nursing Program

Special application is required for admission to the nursing program. It is recommended that students work closely with their advisor to ensure all application requirements are fully met. A Nursing Applicant Information Guide, available from the Advising Center and online at the Nursing website, describes program prerequisites and application process. Refer to the Nursing website: www.yc.edu/nursing for application deadlines.

Transfer Students

Students transferring from other regionally accredited institutions will have their completed general education coursework evaluated on an individual basis.

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 minimum, students will be required to lift clients, stand for several hours at a time, perform bending activities and perform fine motor skills with dexterity. The clinical nursing experience places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting clients' 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 submitting their application. The technical standards for the program are identified in the Nursing Applicant Information Guide.

Graduation Requirement

All required courses for the AAS in Nursing degree must be completed with a grade of "C" or better. Math and science coursework must be completed within the last ten years.

Licensure

Graduates receiving an Associate of Applied Science (AAS) in Nursing Degree are eligible to apply and take the National Council Licensure Exam (NCLEX) for the Registered Nurse (R.N.). The R.N. has the opportunity to be employed in a variety of health care settings such as acute, long term care, hospice, and community based settings. Registered Nurses function within their legal scope of practice as set forth by the State Boards of Nursing and professional standards per the American Nurses Association (ANA). The AAS degree provides the articulation foundation for a Bachelor of Science in Nursing (BSN) degree within the university or at Yavapai College. YC graduates will be automatically accepted in YC'S RN-BSN program after they obtain an unencumbered RN license (single state (AZ) or multi-state).

Transfer

Students intending to transfer courses toward a Bachelor Degree in Nursing should consult the catalog of the school to which they plan to transfer. Materials are available in the Advising Center and through the Department of Nursing to assist students in selecting courses equivalent to those required in baccalaureate nursing programs in Arizona. Generally 64 credits from community colleges are transferable to Arizona public universities: specific articulation information is available through AZTransfer at www.aztransfer.com.

Credit Hours Required: 68.5

Pre-Entry Requirements

Note: *Pre-entry requirements must be complete or in progress in order to apply to the Nursing Program. To prepare to apply to the AAS Nursing Program, it is recommended that students begin in the Associate of Arts (Nursing Intent) degree*

program and work closely with an academic advisor to ensure timely and on-track progression for application submission.

The 28-credit hour pre-entry block includes Anatomy & Physiology I & II, Microbiology, and all of the General Education requirements.

Prior to program application, the applicant must be certified as a CNA, LNA or have completed AHS 114, AHS 114C, and AHS 114L (or equivalent) within the last three years.

General Education (16 credits)

- First-Year Composition **Credits: 6**
- MAT 142 - College Mathematics or higher level math (Mathematics) **Credits: 3**
- BIO 181 - General Biology I **OR** BIO 156 - Human Biology for Allied Health (Physical and Biological Science) **Credits: 4**
- PHI 204 - Medical Ethics (Arts and Humanities) **OR** PSY 101 - Introductory Psychology (Social and Behavioral Science) **Credits: 3**

Anatomy & Physiology I & II (8 credits)

- BIO 201 - Human Anatomy and Physiology I **Credits: 4**
- BIO 202 - Human Anatomy and Physiology II **Credits: 4**

Microbiology (4 credits)

- BIO 205 - Microbiology **Credits: 4**

Program Requirements

Nursing Core (40.5 credits)

- NSG 140 - Nursing Theory I **Credits: 4**
- NSG 142 - Application of Nursing Theory I **Credits: 2**
- NSG 143 - Development of Nursing Practice I **Credits: 2**
- NSG 144 - Mental Health Nursing Theory I **Credits: 1**
- NSG 145 - Pharmacology for Nursing I **Credits: 1**
- NSG 151 - Nursing Theory II **Credits: 3**
- NSG 152 - Application of Nursing Theory II **Credits: 2**
- NSG 153 - Development of Nursing Practice II **Credits: 2**
- NSG 154 - Maternal/Child Nursing Theory **Credits: 2**
- NSG 155 - Pharmacology for Nursing II **Credits: 2**
- NSG 241 - Nursing Theory III **Credits: 5**
- NSG 242 - Application of Nursing Theory III **Credits: 3**
- NSG 260 - Mental Health Nursing Theory II **Credits: 2**
- NSG 270 - Nursing Theory IV **Credits: 3**
- NSG 272 - Application of Nursing Theory IV **Credits: 4.5**
- NSG 280 - Professional Nursing Concepts **Credits: 2**

Program Outcomes

Upon successful completion of the Nursing Degree program, the learner will be able to:

1. Patient Centered Care: Recognize the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences, values and needs.
2. Teamwork and Collaboration: Function effectively within nursing and interprofessional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
3. Evidence Based Practice: Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal healthcare.

4. Quality Improvement: Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems.
5. Safety: Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
6. Informatics: Use information and technology (IT) to communicate, manage knowledge, mitigate error and support decision-making.

Paralegal Studies - AAS

The Paralegal Studies program is designed to prepare students for positions as paralegals in the legal and business fields. Individuals who are already employed in the legal field and seeking advancement opportunities may also select this program of study. Paralegals work under the supervision of an attorney and their work includes preparing legal documents, researching and compiling information, and communicating with clients. Excellent written and oral communication skills, as well as computer literacy skills, are important to the paralegal.

Credit Hours Required: 61

Note: *This degree is primarily designed to prepare students for direct employment. Students who are preparing to transfer to a baccalaureate degree-granting institution for an advanced degree in paralegal studies should contact an academic advisor for assistance in establishing an educational plan.*

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- Physical and Biological Sciences **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (24 credits)

- LAW 100 - Introduction to Paralegal Studies **Credits:** 3
- LAW 102 - Legal Computer Applications **Credits:** 3
- LAW 103 - Ethics and the Law **Credits:** 3
- LAW 217 - Legal Research & Writing I **Credits:** 3
- LAW 218 - Legal Research and Writing II **Credits:** 3
- LAW 220 - Civil Procedure I **Credits:** 3
- LAW 221 - Civil Procedure II **Credits:** 3
- LAW 232 - Evidence **Credits:** 3

Program Electives

Select 18 credit hours from the following courses:

- LAW 104 - Wills, Trusts and Probate **Credits:** 3
- LAW 107 - Law Office Management **Credits:** 3
- LAW 109 - Substantive Criminal Law **Credits:** 3
- LAW 202 - Real Estate Law **Credits:** 3
- LAW 203 - Family Law **Credits:** 3
- LAW 204 - Business Organizations **Credits:** 3
- LAW 205 - Contracts **Credits:** 3
- LAW 212 - Juvenile Justice Procedures **Credits:** 3
- LAW 214 - Juvenile Dependency Law **Credits:** 3
- LAW 230 - Administrative Law **Credits:** 3
- LAW 260 - Procedural Criminal Law **Credits:** 3
- LAW 270 - Mediation and Negotiation **Credits:** 3
- LAW 275 - Bankruptcy **Credits:** 3
- LAW 290 - Constitutional Law: Civil Liberties and Civil Rights **Credits:** 3
- LAW 296 - Internship: Paralegal Studies **Credits:** 3

Program Outcomes

Upon successful completion of the Paralegal Studies Degree program, the learner will be able to:

1. Demonstrate analytical and judgment abilities as a legal professional.

2. Apply knowledge and understanding of substantive law and legal principles in one or more areas of practice.
3. Produce legal documents that meet professional standards, reflect accurate legal research, and are in correct format.
4. Act in a professional manner consistent with applicable ethical standards.
5. Demonstrate proficiency using software and technology available to the legal profession.

Paramedicine - AAS

The Associate of Applied Science in Paramedicine is a nationally accredited program designed to prepare students to become paramedics. This program is a formal education in such paramedicine topics as anatomy and physiology, pathophysiology, cardiology, pulmonary, pharmacology, pediatrics, geriatrics, hematology, and toxicology. Paramedicine builds upon EMT education and includes Paramedic Scope of Practice. Paramedicine is integrated with fire service, law enforcement, ground transport services, flight transport services, search and rescue, hospitals, clinical settings, community paramedicine, and EMS education. There is a Paramedicine Certificate available.

Accreditation: This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) with the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP) interpreting and enforcing the CAAHEP standards, and is approved by the Arizona Department of Health Services, Bureau of Emergency Medical Services and Trauma Systems.

Credit Hours Required: 60

Note: Information regarding admission to the Paramedicine program is available at the Emergency Medical Services Department's website, www.yc.edu/ems. Interested students begin by filling out an application form. Once accepted into the program, additional information regarding specific documents required and or needed for program admission will be given to each student during a required paramedic orientation. Before applying, one must have a current EMT or AEMT certification card. For more information, please contact ems@yc.edu

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits: 6**
- Mathematics **Credits: 3**
- BIO 160 - Intro to Human Anatomy and Physiology (Physical and Biological Sciences) **Credits: 4**
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits: 6** ¹

Note: ¹ Select from two different prefixes

Program Requirements (41 credits)

- EMS 162 - Introduction to Pharmacology for EMS Professionals **Credits: 3**
- EMS 164 - ECG Rhythm Analysis & Interpretation for EMS Professionals **Credits: 3**
- EMS 201 - Advanced Cardiac Life Support Initial Provider in Paramedicine **Credits: 1**
- EMS 202 - Pediatric Advanced Life Support Initial Provider in Paramedicine **Credits: 1**
- EMS 203 - Pre-hospital Trauma Life Support **Credits: 1**
- EMS 239 - Airway and Ventilatory Management in Paramedicine **Credits: 2**
- EMS 252 - Pharmacology in Paramedicine **Credits: 3**
- EMS 254 - Paramedic Practicum I **Credits: 1**
- EMS 265 - Paramedic Practicum II **Credits: 1**
- EMS 267 - Technical Operations in Paramedicine **Credits: 3**
- EMS 269 - Trauma Patient Management in Paramedicine **Credits: 2**
- EMS 271 - Medical Emergencies in Paramedicine I **Credits: 3**
- EMS 271L - Medical Emergencies in Paramedicine Lab **Credits: 2**
- EMS 272 - Medical Emergencies in Paramedicine II **Credits: 3**
- EMS 272L - Comprehensive Patient Assessment in Paramedicine I **Credits: 4**
- EMS 273 - Medical Emergencies in Paramedicine III **Credits: 4**
- EMS 273L - Comprehensive Patient Assessment in Paramedicine II **Credits: 4**

Program Goal

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

This goal aligns with standards from the Arizona Department of Health Services, Bureau of Emergency Medical Services, United States Department of Transportation National Emergency Medical Services Education Standards, and the Essentials and Guidelines from the Committee on Accreditation of Emergency Medical Services Programs (CoAEMSP).

Program Outcomes

Upon successful completion of the Paramedicine Degree program, the learner will be able to:

1. Maintain patient, public, personnel, and personal health, wellness, and safety.
2. Demonstrate personal behaviors consistent with professional standards.
3. Communicate efficiently and effectively with members of diverse populations in a culturally responsive manner.
4. Effectively function within a multi-disciplinary healthcare system, recognizing roles, responsibilities, and scope of practice.
5. Efficiently synthesize and evaluate multiple sources of information.
6. Perform comprehensive patient assessment.
7. Develop a working differential diagnosis using multiple sources of information.
8. Make informed, autonomous decisions in both clinical and uncontrolled settings.
9. Guide and support the healthcare team, navigating interpersonal dynamics.
10. Effectively manage patients.

Radiologic Technology - AAS

The Associate of Applied Science in Radiologic Technology prepares students for entry-level positions as radiographers. The program is designed in accordance with the Radiography Curriculum established by the American Society of Radiologic Technologists and consists of classroom and laboratory instruction integrated with hands-on experience in a clinical setting.

Accreditation: This program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

Credit Hours Required: 62-64

Application for Admission to the Radiology Program

A special application is required for admission to the radiology technology program. It is recommended that students work closely with their advisor to ensure all application requirements are fully met. Refer to the website: www.yc.edu/radiology

Transfer Students

Students transferring from other regionally accredited institutions will have their completed general education coursework evaluated on an individual basis. All math and science coursework must be completed within the last 10 years.

Health Declaration

It is essential that radiology students be able to perform a number of physical activities in the clinical portion of the program. At minimum, students will be required to lift clients, stand for several hours at a time, perform bending activities, and perform fine motor skills with dexterity. The clinical radiology experience places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting clients' 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 before making application. The technical standards for the program are identified in the Radiology Technology Program Application.

Graduation Requirement

All required courses for the AAS in Radiology Technology degree must be completed with a minimum grade of 75%.

Licensure

Graduates receiving an Associate of Applied Science (AAS) in Radiology Technology Degree are eligible to challenge the American Registry of Radiologic Technology (ARRT) Exam for Radiography. The RT(R) has an opportunity to be employed in a variety of healthcare settings such as hospitals, outpatient surgical centers, outpatient imaging centers, mobile imaging, and physician offices. Radiologic Technologists function within their legal scope of practice set forth by the state they practice in, the American Society of Radiologic Technologists (ASRT) Practice Standards, and the American Registry of Radiology Technology (ARRT) Standard of Ethics. The AAS degree provides the articulation foundation for a Bachelor of Science in Radiologic Science (BSRS) degree within the university.

Transfer

Students intending to transfer courses toward a Bachelor's Degree in Radiology Science should consult the catalog of the school to which they plan to transfer. Generally, 64 credits from community colleges are transferable to Arizona public universities: specific articulation information is available through AZTransfer at www.aztransfer.com

Pre-Entry Requirements

Note: Pre-entry requirements must be complete or in progress in order to apply to the Radiologic Technology Program. To prepare to apply for the AAS Program, it is recommended that students begin in the Associate of Arts (Radiologic Tech Intent) degree program and work closely with an academic advisor to ensure timely and on-track progression for application submission.

General Education (19 credits)

These General Education courses must be taken prior to applying to the Radiologic Technology program. Math and science coursework must be completed within the last ten years.

- First-Year Composition **Credits: 6**
- MAT 152 - College Algebra or equivalent or any math course for which MAT 152 is a prerequisite (Mathematics) **Credits: 3**
- BIO 160 - Intro to Human Anatomy and Physiology (Physical and Biological Science) **Credits: 4**
- PHI 204 - Medical Ethics (Arts and Humanities) **Credits: 3**
- PSY 245 - Human Growth and Development (Social and Behavioral Science) **Credits: 3**

Program Requirements

Radiologic Technology Core (43 credits)

- RAD 100 - Introduction to Medical Imaging **Credits: 2**
- RAD 111 - Radiographic Positioning I **Credits: 3**
- RAD 112 - Radiographic Positioning Lab I **Credits: 2**
- RAD 135 - Radiation Physics and Equipment **Credits: 3**
- RAD 141 - Radiographic Positioning II **Credits: 3**
- RAD 142 - Radiographic Positioning Lab II **Credits: 2**
- RAD 158 - Radiographic Image Production **Credits: 2**
- RAD 161 - Radiology Clinical Education I **Credits: 3**
- RAD 162 - Radiology Clinical Education II **Credits: 4**
- RAD 170 - Radiology Patient Care and Pharmacology **Credits: 2**
- RAD 175 - Radiation Biology and Protection **Credits: 2**
- RAD 185 - Radiographic Image Analysis **Credits: 2**
- RAD 201 - Radiology Clinical Education III **Credits: 4**
- RAD 202 - Radiology Clinical Education IV **Credits: 4**
- RAD 250 - Radiographic Pathology **Credits: 2**
- RAD 255 - Radiology Registry Prep and Professional Development **Credits: 3**

Elective Studies (2-4 credits)

- ICE 100 - Computed Tomography Certification **Credits: 3**
- ICE 150 - Bone Densitometry Certification **Credits: 3**
- ICE 200 - Magnetic Resonance Certification **Credits: 3**
- ICE 250 - Mammography Initial Training **Credits: 4**
- RAD 215 - Advanced Imaging Systems **Credits: 2**

Program Outcomes

Upon successful completion of the Radiologic Technology AAS Degree program, the learner will:

1. Demonstrate the clinical competency expected of entry-level radiologic technologists.
2. Communicate effectively within the radiologic science industry.
3. Demonstrate critical thinking and problem-solving skills.
4. Exhibit professional behavior in alignment with the ethical and professional standards of radiologic science.

Viticulture and Enology - AAS

The Viticulture and Enology degree program prepares students for a variety of careers in vineyards (vineyard workers, crew leaders, managers, viticulturists) to wineries (winemakers, cellar workers, lab technicians).

Credit Hours Required: 63

Note: *Students must be 21 years of age or older to pursue the Viticulture and Enology Degree.*

AAS General Education Requirements (19 credits)

- College Composition or Applied Communication **Credits:** 6
- Mathematics **Credits:** 3
- CHM 130 - Fundamental Chemistry (Physical and Biological Sciences) **Credits:** 4
- Arts and Humanities **AND/OR** Social and Behavioral Sciences **Credits:** 6 ¹

Note: ¹ *Select from two different prefixes*

Program Requirements (44 credits)

- AGS 105 - Soils **Credits:** 3
- AGS 107 - Entomology **Credits:** 3
- AGS 274 - Water Management **Credits:** 3
- VEN 100 - Introduction to Viticulture **Credits:** 3
- VEN 101 - Establishing a Vinifera Vineyard **Credits:** 3
- VEN 103 - Maintaining a Vinifera Vineyard **Credits:** 4
- VEN 121 - Wines of the World **Credits:** 2
- VEN 122 - Sensory Evaluation of Wine **Credits:** 2
- VEN 195E - Winemaking Practicum **Credits:** 2
 - *Note: Students must complete VEN 195E in Fall and Spring for a total of 4 credits.*
- VEN 195ES - Winemaking Practicum Summer **Credits:** 2
- VEN 195V - Viticulture Practicum **Credits:** 2
 - *Note: Students must complete VEN 195V in Fall and Spring for a total of 4 credits.*
- VEN 195VS - Viticulture Practicum Summer **Credits:** 2
- VEN 200 - Science of Winemaking I **Credits:** 3
- VEN 201 - Science of Winemaking II **Credits:** 3
- VEN 202 - Science of Winemaking III **Credits:** 3

Program Outcomes

Upon successful completion of the Viticulture and Enology Degree program, the learner will be able to:

1. Design a site for vitis vinifera production.
2. Maintain crop health.
3. Grow wine grapes.
4. Perform steps in the winemaking process.
5. Evaluate wines.
6. Describe legal compliances and business functions in the wine industry.

Bachelor's Degrees

Bachelor of Applied Science in Business

The Bachelor of Applied Science is an optimized 92-credit degree program designed to provide students with focused business skills and practical application, preparing them for leadership roles and career advancement. The curriculum emphasizes core business concepts and hands-on learning experiences to meet the demands of today's dynamic workforce.

Credit Hours Required: 92

Note: This program can be completed entirely online. Not all general education options or program electives are offered online, however there will be a variety of online classes from which to choose in order to meet the requirements.

General Education Requirements (32 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities² **Credits:** 6
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3
- Options³ **Credits:** 4
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ Must be in composition (ENG 101 and ENG 102 or equivalents)
- ² Recommend that students select from two different prefixes
- ³ Limit one course per category

Lower Division Requirements (15 credits)

- ACC 131 - Principles of Accounting I **Credits:** 3
- BSA 131 - Introduction to Business **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3
- ECN 232 - Business Statistical Analysis **Credits:** 3
- ECN 236 - Principles of Economics-Micro **Credits:** 3

Business Foundations Requirements (15 credits)

- BSA 237 - Legal Environment of Business **Credits:** 3
- MGT 140 - Organizational Behavior **Credits:** 3
- MGT 220 - Principles of Management **Credits:** 3
- MGT 233 - Business Communication **Credits:** 3
- MKT 240 - Principles of Marketing **Credits:** 3

Upper Division Requirements (30 credits)

- BSA 300 - Global Environment of Business **Credits:** 3
- BSA 305 - Principles of Finance **Credits:** 3
- BSA 310 - Logistics and Supply Chain Theory **Credits:** 3
- BSA 360 - Project Management Essentials **Credits:** 3
- BSA 394 - Mentorship: Business **Credits:** 3

- BSA 400 - Business Policy and Strategic Planning **Credits: 3**
- BSA 410 - Business Analytics **Credits: 3**
- BSA 494 - Capstone Project: Business **OR** BSA 495 - Research Project: Business **OR** BSA 496 - Internship Capstone: Business **Credits: 3**
- LDR 300 - Fundamentals of Leadership **Credits: 3**
- MKT 340 - Marketing Management **Credits: 3**

Program Outcomes

1. Demonstrate advanced knowledge and skills in core functional areas of business.
2. Apply critical thinking skills in complex business-related situations.
3. Demonstrate ability to analyze information for effective decision-making.
4. Demonstrate effective professional communication skills.
5. Demonstrate ethical approaches to decision-making.
6. Apply technological tools for effective support of the business environment.

Bachelor of Science in Business

Credit Hours Required: 121

The Bachelor of Science in Business program prepares individuals to assume management or supervisory positions in business, industry, and government. It provides essential skills in a broad range of business functions, including accounting, computer usage, leadership, management, and marketing. Students can enter the degree program as freshmen or transfer from an associate degree program to the bachelor's degree. Students will choose from one of four concentrations.

Select a Concentration to view the requirements:

- BS in Business - Accounting Concentration
- BS in Business - Digital Marketing Concentration
- BS in Business - Entrepreneurship Concentration
- BS in Business - Organizational Management and Leadership Concentration

Program Outcomes

1. Demonstrate advanced knowledge and skills in core functional areas of business.
2. Apply critical thinking skills in complex business-related situations.
3. Demonstrate ability to analyze information for effective decision-making.
4. Demonstrate effective professional communication skills.
5. Demonstrate ethical approaches to decision-making.
6. Apply technological tools for effective support of the business environment.

BS in Business - Accounting Concentration

General Education Requirements (32 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- Quantitative Reasoning **Credits:** 3
- Natural Sciences **Credits:** 4
- Arts and Humanities² **Credits:** 6
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3
- Options³ **Credits:** 4
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ Must be in composition (ENG 101 and ENG 102 or equivalents)
- ² Recommend that students select from two different prefixes
- ³ Limit one course per category

Lower Division Requirements (18 credits)

- ACC 131 - Principles of Accounting I **Credits:** 3
- BSA 131 - Introduction to Business **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3
- ECN 232 - Business Statistical Analysis **Credits:** 3
- ECN 236 - Principles of Economics-Micro **Credits:** 3
- MKT 240 - Principles of Marketing **Credits:** 3

Accounting Lower Division Requirements (12 credits)

- ACC 115 - Basic Tax Planning **Credits:** 3

- ACC 132 - Principles of Accounting II **Credits: 3**
- ACC 210 - Data Analytics for Accounting **Credits: 3**
- BSA 238 - Advanced Professional Productivity Solutions **Credits: 3**

Lower Division Electives (14 credits)

- All electives need to be 100-level or above. Students are encouraged to see an academic advisor to assist with selecting the most appropriate courses.
 - THR, DAN, PHE, and REC are limited to a total of 4 activity-based credits hours.
 - Practicums, internships, project classes, private/applied music lessons, and music ensembles are limited to a total of 6 credit hours.
- The following courses are recommended to meet a portion of the lower-division electives:
 - ACC 117 - Advanced Tax Planning and Preparation **Credits: 3**
 - ACC 121 - Introductory Accounting **Credits: 3**
 - ACC 122 - Payroll Accounting **Credits: 3**
 - ACC 160 - Computer Accounting with QuickBooks **Credits: 3**
 - ACC 233 - Intermediate Accounting I **Credits: 3**
 - ACC 234 - Intermediate Accounting II **Credits: 3**
 - BSA 237 - Legal Environment of Business **Credits: 3**
 - ECN 235 - Principles of Economics-Macro **Credits: 3**
 - ECN 235 is a recommended elective if not applied to the AGECE.

Upper Division Requirements (30 credits)

- BSA 300 - Global Environment of Business **Credits: 3**
- BSA 305 - Principles of Finance **Credits: 3**
- BSA 310 - Logistics and Supply Chain Theory **Credits: 3**
- BSA 360 - Project Management Essentials **Credits: 3**
- BSA 394 - Mentorship: Business **Credits: 3**
- BSA 400 - Business Policy and Strategic Planning **Credits: 3**
- BSA 410 - Business Analytics **Credits: 3**
- BSA 494 - Capstone Project: Business **OR** BSA 495 - Research Project: Business **OR** BSA 496 - Internship Capstone: Business **Credits: 3**
- LDR 300 - Fundamentals of Leadership **Credits: 3**
- MKT 340 - Marketing Management **Credits: 3**

Accounting Upper Division Requirements (15 credits)

- ACC 310 - Accounting Information Systems **Credits: 3**
- ACC 320 - Cost Accounting **Credits: 3**
- ACC 410 - Forensic Accounting and Fraud Examination **Credits: 3**
- ACC 420 - Governmental and Nonprofit Accounting **Credits: 3**
- ACC 430 - Auditing and Assurance Services **Credits: 3**

BS in Business - Digital Marketing Concentration

General Education Requirements (32 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits: 6**
- Quantitative Reasoning **Credits: 3**
- Natural Sciences **Credits: 4**
- Arts and Humanities² **Credits: 6**
- Social and Behavioral Sciences² **Credits: 6**
- Institutions in the Americas **Credits: 3**
- Options³ **Credits: 4**

- Oral Communication
- Natural Sciences
- Arts and Humanities
- Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*
- ³ *Limit one course per category*

Lower Division Requirements (18 credits)

- ACC 131 - Principles of Accounting I **Credits: 3**
- BSA 131 - Introduction to Business **Credits: 3**
- BSA 228 - Professional Productivity Solutions **Credits: 3**
- ECN 232 - Business Statistical Analysis **Credits: 3**
- ECN 236 - Principles of Economics-Micro **Credits: 3**
- MKT 240 - Principles of Marketing **Credits: 3**

Lower Division Electives (26 credits)

- All electives need to be 100-level or above. Students are encouraged to see an academic advisor to assist with selecting the most appropriate courses.
 - THR, DAN, PHE, and REC are limited to a total of 4 activity-based credits hours.
 - Practicums, internships, project classes, private/applied music lessons, and music ensembles are limited to a total of 6 credit hours.
- The following courses are recommended to meet a portion of the lower-division electives:
 - ART 129 - Digital Drawing and Painting
 - ART 130 - Web Design
 - ART 131 - Graphic Design I
 - ART 132 - Graphic Design II
 - ART 137 - Adobe Photoshop I
 - ART 139 - Fundamentals of Video Editing
 - ART 230 - Graphic Design III
 - ART 231 - Digital Illustration
 - BSA 237 - Legal Environment of Business
 - FMA 108 - Social Media Planning and Implementation
 - FMA 116 - The Business of Content Creation
 - FMA 134 - Immersive Transmedia Storytelling
 - MGT 188 - Competitor Differentiation
 - MKT 231 - Social Media Marketing
 - MKT 240 - Principles of Marketing
 - MKT 280 - Marketing Tactics and Techniques
 - PHI 110 - Critical Thinking in the Digital Age
 - VGD 280 - Game Design Documentation and Marketing

Upper Division Requirements (30 credits)

- BSA 300 - Global Environment of Business **Credits: 3**
- BSA 305 - Principles of Finance **Credits: 3**
- BSA 310 - Logistics and Supply Chain Theory **Credits: 3**
- BSA 360 - Project Management Essentials **Credits: 3**
- BSA 394 - Mentorship: Business **Credits: 3**
- BSA 400 - Business Policy and Strategic Planning **Credits: 3**
- BSA 410 - Business Analytics **Credits: 3**

- BSA 494 - Capstone Project: Business **OR** BSA 495 - Research Project: Business **OR** BSA 496 - Internship Capstone: Business **Credits: 3**
- LDR 300 - Fundamentals of Leadership **Credits: 3**
- MKT 340 - Marketing Management **Credits: 3**

Digital Marketing Upper Division Requirements (15 credits)

- MKT 310 - Digital Marketing Landscape
- MKT 320 - Digital Audience Strategy
- MKT 410 - Brand Strategy: Tactics & Digital Tools
- MKT 420 - Neuromarketing and Social Media Management
- MKT 430 - Digital Marketing Data and Analytics

BS in Business - Entrepreneurship Concentration

General Education Requirements (32 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits: 6**
- Quantitative Reasoning **Credits: 3**
- Natural Sciences **Credits: 4**
- Arts and Humanities² **Credits: 6**
- Social and Behavioral Sciences² **Credits: 6**
- Institutions in the Americas **Credits: 3**
- Options³ **Credits: 4**
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*
- ³ *Limit one course per category*

Lower Division Requirements (18 credits)

- ACC 131 - Principles of Accounting I **Credits: 3**
- BSA 131 - Introduction to Business **Credits: 3**
- BSA 228 - Professional Productivity Solutions **Credits: 3**
- ECN 232 - Business Statistical Analysis **Credits: 3**
- ECN 236 - Principles of Economics-Micro **Credits: 3**
- MKT 240 - Principles of Marketing **Credits: 3**

Lower Division Electives (26 credits)

- All electives need to be 100-level or above. Students are encouraged to see an academic advisor to assist with selecting the most appropriate courses.
 - THR, DAN, PHE, and REC are limited to a total of 4 activity-based credits hours.
 - Practicums, internships, project classes, private/applied music lessons, and music ensembles are limited to a total of 6 credit hours.
- The following courses are recommended to meet a portion of the lower-division electives:
 - ACC 132 - Principles of Accounting II
 - BSA 237 - Legal Environment of Business
 - BSA 238 - Advanced Professional Productivity Solutions
 - ECN 235 - Principles of Economics-Macro
 - *Note: ECN 235 is a recommended selection if not applied to the AGECE*

- MGT 233 - Business Communication

Upper Division Requirements (30 credits)

- BSA 300 - Global Environment of Business **Credits: 3**
- BSA 305 - Principles of Finance **Credits: 3**
- BSA 310 - Logistics and Supply Chain Theory **Credits: 3**
- BSA 360 - Project Management Essentials **Credits: 3**
- BSA 394 - Mentorship: Business **Credits: 3**
- BSA 400 - Business Policy and Strategic Planning **Credits: 3**
- BSA 410 - Business Analytics **Credits: 3**
- BSA 494 - Capstone Project: Business **OR** BSA 495 - Research Project: Business **OR** BSA 496 - Internship Capstone: Business **Credits: 3**
- LDR 300 - Fundamentals of Leadership **Credits: 3**
- MKT 340 - Marketing Management **Credits: 3**

Entrepreneurship Upper Division Requirements (15 credits)

- LDR 485 - Entrepreneurial Leadership **Credits: 3**
- MGT 380 - Introduction to Entrepreneurship **Credits: 3**
- MGT 385 - Customer Relations and Service Management **Credits: 3**
- MKT 480 - Strategic Digital Marketing **Credits: 3**
- MKT 490 - Entrepreneurial Marketing **Credits: 3**

BS in Business - Organizational Management and Leadership Concentration

General Education Requirements (32 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits: 6**
- Quantitative Reasoning **Credits: 3**
- Natural Sciences **Credits: 4**
- Arts and Humanities² **Credits: 6**
- Social and Behavioral Sciences² **Credits: 6**
- Institutions in the Americas **Credits: 3**
- Options³ **Credits: 4**
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ Must be in composition (ENG 101 and ENG 102 or equivalents)
- ² Recommend that students select from two different prefixes
- ³ Limit one course per category

Lower Division Requirements (18 credits)

- ACC 131 - Principles of Accounting I **Credits: 3**
- BSA 131 - Introduction to Business **Credits: 3**
- BSA 228 - Professional Productivity Solutions **Credits: 3**
- ECN 232 - Business Statistical Analysis **Credits: 3**
- ECN 236 - Principles of Economics-Micro **Credits: 3**
- MKT 240 - Principles of Marketing **Credits: 3**

Lower Division Electives (26 credits)

- All electives need to be 100-level or above. Students are encouraged to see an academic advisor to assist with selecting the most appropriate courses.
 - THR, DAN, PHE, and REC are limited to a total of 4 activity-based credits hours.
 - Practicums, internships, project classes, private/applied music lessons, and music ensembles are limited to a total of 6 credit hours.
- The following courses are recommended to meet a portion of the lower-division electives:
 - ACC 132 - Principles of Accounting II
 - BSA 237 - Legal Environment of Business
 - BSA 238 - Advanced Professional Productivity Solutions
 - ECN 235 - Principles of Economics-Macro
 - *Note: ECN 235 is a recommended selection if not applied to the AGECE*
 - MGT 233 - Business Communication

Upper Division Requirements (30 credits)

- BSA 300 - Global Environment of Business **Credits: 3**
- BSA 305 - Principles of Finance **Credits: 3**
- BSA 310 - Logistics and Supply Chain Theory **Credits: 3**
- BSA 360 - Project Management Essentials **Credits: 3**
- BSA 394 - Mentorship: Business **Credits: 3**
- BSA 400 - Business Policy and Strategic Planning **Credits: 3**
- BSA 410 - Business Analytics **Credits: 3**
- BSA 494 - Capstone Project: Business **OR** BSA 495 - Research Project: Business **OR** BSA 496 - Internship Capstone: Business **Credits: 3**
- LDR 300 - Fundamentals of Leadership **Credits: 3**
- MKT 340 - Marketing Management **Credits: 3**

Org Management & Leadership Upper Division Requirements (15 credits)

- LDR 420 - Leadership and Change Management **Credits: 3**
- LDR 425 - Leadership Application and Development **Credits: 3**
- LDR 430 - Managing Talent and Developing Leaders **Credits: 3**
- MGT 320 - Business Process Improvement **Credits: 3**
- MGT 325 - Supportive and Collaborative Management **Credits: 3**

Bachelor of Science in Computer Science

The Bachelor of Science in Computer Science program is tailored to immerse individuals in the fundamental concepts, methodologies, and innovative technologies that form the backbone of the computer science field. The program places a strong emphasis on the theoretical frameworks and practical applications of computing, preparing individuals to become pioneers in technology development, system design, and computational problem-solving. Designed to balance core computer science principles with opportunities for specialization in areas driving technological advancement. Students can enter the degree program as freshmen or as a transfer student to the bachelor's degree.

Credit Hours Required: 120

Note: *This program can be completed entirely online. Not all general education options or program electives are offered online, however there will be a variety of online classes from which to choose in order to meet the requirements.*

General Education Requirements (AGEC) (32 credits)

Minimum credit hours are listed for each category.

- Written Communication¹ **Credits:** 6
- MAT 152 - College Algebra **OR** MAT 182 - Precalculus (Algebra) **Credits:** 3 (Quantitative Reasoning)
- Natural Sciences **Credits:** 4
- Arts and Humanities² **Credits:** 3
- PHI 105 - Introduction to Ethics **Credits:** 3 (Arts and Humanities)
- Social and Behavioral Sciences² **Credits:** 6
- Institutions in the Americas **Credits:** 3
- Options³ **Credits:** 4
 - Oral Communication
 - Natural Sciences
 - Arts and Humanities
 - Social and Behavioral Sciences

Notes:

- ¹ *Must be in composition (ENG 101 and ENG 102 or equivalents)*
- ² *Recommend that students select from two different prefixes*
- ³ *Limit one course per category*

Lower Division Requirements (24 credits)

- CNT 105 - Cybersecurity Principles **Credits:** 3
- CNT 135 - Security+: Implementing and Maintaining Network Security **Credits:** 3
- CSA 110 - Introduction to Computer Information Systems **Credits:** 3
- CSA 214 - Foundations of Data Science **Credits:** 3
- CSA 250 - Introduction to Artificial Intelligence **Credits:** 3
- CSA 281 - Systems Analysis and Design **Credits:** 3
- CSC 105 - Introduction to Programming **Credits:** 3
- CSC 113 - Programming: Python **Credits:** 3

Lower Division Electives (19 credits)

- All electives need to be 100-level or above. Students are encouraged to see an academic advisor to assist with selecting the most appropriate courses.
 - THR, DAN, PHE, and REC are limited to a total of 4 activity-based credits hours.
 - Practicums, internships, project classes, private/applied music lessons, and music ensembles are limited to a total of 6 credit hours.
- The following course prefixes are recommended lower-division electives: CSA, CNT, CSC, and VGD.

Upper Division Requirements (45 credits)

- CSA 310 - Advanced Artificial Intelligence **Credits: 4**
- CSA 315 - Software Engineering for the Cloud **Credits: 3**
- CSA 320 - Advanced Data Science **Credits: 3**
- CSA 345 - Information Technology Management **Credits: 4**
- CSA 355 - Advanced Programming Techniques **Credits: 4**
- CSA 390 - IT Project Management **Credits: 4**
- CSA 420 - Ethics in Information Technology **Credits: 3**
- CSA 440 - Software Assurance **Credits: 4**
- CSA 450 - Big Data Architecture **Credits: 4**
- CSA 470 - Disruptive Technologies **Credits: 4**
- CSA 494 - Project Capstone: Computer Science **Credits: 4**
- CSA 496 - Internship: Computer Science **Credits: 4** OR CSA 498 - Special Topics in Computer Science **Credits: 4**

Program Outcomes

1. Synthesize computer science principles to architect solutions for complex problems.
2. Create scalable and efficient software systems using advanced programming techniques.
3. Evaluate algorithms and systems to enhance computational efficiency and performance.
4. Critique the impact of computing on society to promote ethical practices in technology development.
5. Investigate emerging technologies and theoretical frameworks to advance knowledge in computer science.

Bachelor of Science in Nursing (RN - BSN)

The Bachelor of Science in Nursing (RN-BSN) degree prepares nurse leaders by building on prior knowledge and experience to address the healthcare needs of the community. The RN-BSN degree requires completion of a minimum of 120 credits. RN-BSN courses are 100% online and include two service-learning projects. The practice experience can be in any setting where healthcare is delivered that will facilitate the attainment of course and program outcomes. Students completing LDR 201, LDR 202, and LDR 203 will earn an additional certificate in Strategic Leadership.

Admission to the program requires successful completion of an associate degree nursing program at a regionally accredited institution validated by transcript(s) and possession of an active, unencumbered RN license.

Credit Hours Required: 120

Note: *There are special admission requirements for the RN-BSN degree. Additional information and an application packet are available online at www.yc.edu/bsn.*

General Education Requirements (31 credits)

Minimum credit hours are listed for each category.

- First-Year Composition **Credits:** 6
- Mathematics **Credits:** 3
- MAT 167 - Elementary Statistics or PSY 230 / SOC 230 - Introduction to Statistics in the Social and Behavioral Sciences (or similar) **Credits:** 3
- Physical and Biological Sciences **Credits:** 16
- Arts and Humanities **OR** Social and Behavioral Sciences **Credits:** 3
 - Recommended: PHI 204 - Medical Ethics **OR** PSY 101 - Introductory Psychology

Note: *For the purposes of General Education, associate degrees in nursing earned from accredited institutions will fulfill the same Yavapai College General Education requirements (up to 31 credits) to earn a Bachelor of Science in Nursing (RN-BSN) degree. All students must complete MAT 167 or PSY/SOC 230.*

Credit for Prior Nursing Degree and RN Licensure (40.5 credits)

Sequence of nursing theory, skills, and clinical courses culminating in an accredited nursing degree.

Program Requirements (30.5 credits)

- NSG 310 - Transition and Concepts of Professional Nursing **Credits:** 3
- NSG 320 - Nursing Practice in a Multicultural Society **Credits:** 3
- NSG 330 - Advanced Assessment and Health Promotion **Credits:** 3
- NSG 340 - Nursing Informatics **Credits:** 1.5
- NSG 350 - Nursing Research and Evidence Translation **Credits:** 3
- NSG 410 - Issues in Professional Practice **Credits:** 3
- NSG 420 - Population-Based Nursing in the Community **Credits:** 4
- NSG 430 - Aging and End of Life **Credits:** 3
- NSG 440 - Global Health: Ethics and Human Rights **Credits:** 3
- NSG 450 - Nursing Leadership **Credits:** 4

Program Electives (18 credits)

- All electives need to be 100-level or above. Students are encouraged to see an academic advisor to assist with selecting the most appropriate courses.
 - THR, DAN, PHE, and REC are limited to a total of 4 activity-based credits hours.
- The following courses are **STRONGLY RECOMMENDED** to meet a portion of the lower-division electives:
 - LDR 201 - Leadership Essentials **Credits:** 3
 - LDR 202 - Strategic Leadership **Credits:** 3
 - LDR 203 - Organizational Leadership **Credits:** 3

- MGT 233 - Business Communication **Credits: 3**

Note: *Students who successfully complete LDR 201, LDR 202, and LDR 203 earn a Management - Strategic Leadership Certificate.*

Program Outcomes

Upon successful completion of the Bachelor of Science in Nursing, the learner will be able to:

1. Utilize critical thinking and clinical judgment to plan and implement culturally appropriate, patient-centered care to promote health and prevent disease and injury for diverse populations. (Patient-Centered Care)
2. Demonstrate leadership skills that integrate an understanding of organizational systems and the internal and external forces impacting decision making. (Teamwork and Collaboration)
3. Engage in evidence-based practice as a means of enhancing the quality and safety of client care. (Evidence-Based Practice)
4. Analyze opportunities to gather and use evidence to improve patient care practices and process for quality outcomes. (Quality Improvement)
5. Develop collaborative relationships both inter- and intra-professionally that enable the nurse to effectively advocate for safe, quality outcomes for clients, the nursing profession, and the health care system. (Safety)
6. Use information technologies to improve outcomes and the environments in which nursing practice occurs. (Informatics)
7. Model professionalism based on personal values, ethical principles, and the nursing profession's values and standards. (Professionalism)

Certificates

Accounting Assistant Certificate

The Accounting Assistant certificate program is designed to provide the student an expanded knowledge of basic accounting and business principles while emphasizing communication and computer skills.

Credit Hours Required: 36

Note: *This program can be completed entirely online.*

Program Requirements

- ACC 115 - Basic Tax Planning **Credits:** 3
- ACC 121 - Introductory Accounting **Credits:** 3
- ACC 122 - Payroll Accounting **Credits:** 3
- ACC 131 - Principles of Accounting I **Credits:** 3
- ACC 132 - Principles of Accounting II **Credits:** 3
- ACC 160 - Computer Accounting with QuickBooks **Credits:** 3
- ACC 210 - Data Analytics for Accounting **Credits:** 3
- ACC 233 - Intermediate Accounting I **Credits:** 3
- ACC 234 - Intermediate Accounting II **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3
- MGT 233 - Business Communication **Credits:** 3

Program Electives

Select one course from the following options:

- ACC 296 - Internship: Accounting **Credits:** 3
- BSA 131 - Introduction to Business **Credits:** 3
- BSA 237 - Legal Environment of Business **Credits:** 3
- MGT 132 - Ethics in Business **Credits:** 3

Program Outcomes

Upon successful completion of the Accounting Assistant Certificate program, the learner will be able to:

1. Perform financial accounting functions using proper format and procedure based on Generally Accepted Accounting Principles (GAAP) and the International Financial and Reporting Standards (IFRS).
2. Perform managerial accounting functions using proper format and procedure.
3. Prepare and interpret financial statements and reports for service, merchandising and manufacturing companies.
4. Prepare basic tax returns and communicate the effects of tax rules for individuals, partnerships and corporations.
5. Use current technology and software applications to input, manage, interpret and communicate financial information.

Advanced Bookkeeping Certificate

The Advanced Bookkeeping certificate will prepare students for entry-level positions in a variety of business and office settings where knowledge of bookkeeping and accounting practices is required.

This certificate provides the two-semester foundation for the Accounting Assistant certificate.

Credit Hours Required: 21

Note: *This program can be completed entirely online.*

Program Requirements

- ACC 115 - Basic Tax Planning **Credits:** 3
- ACC 121 - Introductory Accounting **Credits:** 3
- ACC 122 - Payroll Accounting **Credits:** 3
- ACC 131 - Principles of Accounting I **Credits:** 3
- ACC 160 - Computer Accounting with QuickBooks **Credits:** 3
- ACC 210 - Data Analytics for Accounting **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3

Program Outcomes

Upon successful completion of the Advanced Bookkeeping Certificate program, the learner will be able to:

1. Perform financial accounting functions using proper format and procedure based on Generally Accepted Accounting Principles (GAAP) and the International Financial and Reporting Standards (IFRS).
2. Prepare and interpret financial statements and reports for service, merchandising and manufacturing companies.
3. Prepare basic tax returns and communicate the effects of tax rules for individuals, partnerships and corporations.
4. Use current technology and software applications to input, manage, interpret and communicate financial information.

Agriculture Technology Management Certificate

The Agriculture Technology Management Certificate prepares students for work in the agriculture science, business, and technology of plant and animal production and/or about the environmental and natural resources systems industry.

Credit Hours Required: 36

Program Requirements (36 credits)

- AGS 120 - Introduction to the Animal Industry **Credits:** 4
- AGS 157 - Community Supported Agriculture **Credits:** 3
- AGS 202 - Summer Horticulture **Credits:** 2
- AGS 215 - Agricultural Mechanics **Credits:** 3
- AGS 250 - Horticulture Fall Production **Credits:** 4
- AGS 252 - Horticulture Spring Production **Credits:** 4
- AGS 261 - Aquaculture Science **Credits:** 4
- AGS 264 - Aquaculture Management **Credits:** 4
- AGS 280 - Zoo and Domestic Animal Care **Credits:** 4
- AGS 282 - Zoo and Domestic Animal Behavior **Credits:** 4

Program Outcomes

Upon successful completion of the Agriculture Technology Management Certificate program, the learner will be able to:

1. Manage an extensive agriculture facility.
2. Rear fish from egg to market.
3. Develop a water delivery and quality management system.
4. Propagate plants sexually and asexually.
5. Develop and implement an integrated pest management system.
6. Develop and implement a comprehensive management program for exotic and domestic animals.

Air Traffic Control Academy Prep Certificate

The certificate prepares students for the entrance exam into the FAA Air Traffic Control Academy in Oklahoma City.

Credit Hours Required: 9

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- AVT 122 - Fundamentals of Air Traffic Control **Credits:** 3
- AVT 123 - Air Traffic Control Tower Procedures **Credits:** 3
- AVT 124 - Fundamentals of Air Traffic Control Radar Operation **Credits:** 3

Program Outcomes

Upon successful completion of the Air Traffic Control Academy Prep certificate, the learner will be able to:

1. Describe the Air Traffic Control (ATC) System and National Airspace System (NAS).
2. Demonstrate skills in radar separation procedures, airspace protection, speed adjustments and vectoring techniques.
3. Summarize basic VFR Control Tower operations, including duties and responsibilities.
4. Describe basic navigation related to airspace.
5. Explain fundamental effects of various weather conditions on aircrafts.
6. Interpret Instrument Approach Procedure (IAP), Departure Procedure (DP) and Standard Arrival Route (STAR) Charts.

Animal Care and Management Certificate

The Animal Care and Management Certificate Program is designed to prepare students for entry-level positions in the pet and exotic animal industry including veterinary assistant, zookeeper, animal control officer, entrepreneur, pet store technician and boarding/grooming facilities management.

Credit Hours Required: 27

Program Requirements

- AGS 100 - Introductory Equine Science **Credits:** 4
- AGS 101 - Microcomputers in Agriculture **Credits:** 3
- AGS 120 - Introduction to the Animal Industry **Credits:** 4
- AGS 261 - Aquaculture Science **Credits:** 4
- AGS 264 - Aquaculture Management **Credits:** 4
- AGS 280 - Zoo and Domestic Animal Care **Credits:** 4
- AGS 282 - Zoo and Domestic Animal Behavior **Credits:** 4

Program Outcomes

Upon successful completion of the Animal Care and Management Certificate program, the learner will be able to:

1. Manage an extensive agriculture facility.
2. Rear fish from egg to market.
3. Develop a water delivery and quality management system.
4. Develop and implement a comprehensive management program for exotic and domestic animals.

Auto Body Paint and Collision Technology Certificate

The Auto Body Paint and Collision Technology certificate prepares students for entry-level employment in the auto body and collision industry. The program addresses all areas of basic auto body repair and refinishing including: frame and body repair, painting, special effects and graphic design, and upholstery.

Credit Hours Required: 21

Program Requirements

- AUT 105 - Introduction to Auto Body Repair **Credits:** 4
- AUT 106 - Automotive/Motorcycle Custom Painting **Credits:** 3
- AUT 107 - Autographics/Airbrushing **Credits:** 3
- AUT 110 - Advanced Airbrushing Techniques **Credits:** 3
- AUT 111 - Auto Body Welding and Collision Repair **Credits:** 3
- AUT 275 - Basic Automotive Upholstery **Credits:** 3
- AUT 276 - Advanced Upholstery **Credits:** 2

Program Outcomes

Upon successful completion of the Auto Body Paint and Collision Technology Certificate program, the learner will be able to:

1. Paint a car.
2. Upholster a car.
3. Repair auto body damage.
4. Apply airbrushing and graphics.

Automated Industrial Technology Certificate

The Certificate in Automated Industrial Technology prepares students to troubleshoot, maintain and repair a variety of automated electromechanical, product assembly, and product distribution systems that use programmable controls and other methodologies to accomplish system management. These systems include robotic, mechanical, hydraulic, pneumatic, electrical, and electronic devices. Provides the skills to define, install, adjust, and maintain automated systems.

Credit Hours Required: 24

Program Requirements (24 credits)

- AIT 105 - Modern Maintenance Operations **Credits: 3**
- AIT 110 - Mechanical Power Transmission Systems **Credits: 3**
- AIT 115 - Hydraulic Systems **Credits: 3**
- AIT 120 - Pneumatic Systems **Credits: 3**
- AIT 225 - Basic Industrial Motor Control **Credits: 3**
- ELT 101 - Basic Electricity **Credits: 4**
- ELT 102 - Power Electronic Fundamentals **Credits: 3**
- ELT 165 - Programmable Logic Controllers **Credits: 2**

Program Outcomes

Upon successful completion of the Automated Industrial Technology certificate program, the learner will be able to:

1. Analyze AC and DC circuits.
2. Operate automated industrial control systems.
3. Interpret programmable logic controller (PLC) and motor driver status codes.
4. Interpret electrical schematics and piping and instrumentation diagrams (P&IDs).
5. Perform preventative maintenance on automated industrial equipment.
6. Utilize appropriate fabrication techniques for installation and modification of industrial equipment.
7. Describe and adhere to safety, health and environmental rules and regulations.

Automotive Master Technician Certificate

Completion of this certificate program will prepare students for the National Automotive Service Excellence Certification examinations to become a Certified Master Automobile Technician and a Certified Engine Machinist. In addition, students will develop troubleshooting and analysis skills that will increase their diagnostic and repair abilities. Applied computer skills and information distribution within repair facilities are incorporated in this certificate.

Accreditation: This program is accredited by the Automotive Service Excellence Education Foundation (ASE).

Credit Hours Required: 46-47

Note: *National Automotive Service Excellence (ASE) certification is essential to individuals preparing for positions in the automotive industry. ASE certification requires hands-on working experience as well as completion of written examinations. Two years of post high school educational training, such as that offered in the automotive certificate and degree programs at Yavapai College, may be substituted for up to one year of the hands on work experience requirement of the ASE certification.*

Program Requirements

- AUT 103 - Automotive/Diesel Preventative Maintenance **Credits:** 4
- AUT 109 - Auto/Diesel Electrical Systems **Credits:** 4
- AUT 122 - Automatic Transmissions and Transaxles **Credits:** 4
- AUT 123 - Automotive Brakes **Credits:** 4
- AUT 124 - Auto/Diesel Manual Drive Trains **Credits:** 4
- AUT 126 - Auto/Diesel Suspension and Steering **Credits:** 4
- AUT 128 - Auto/Diesel Heating and Air Conditioning **Credits:** 4
- AUT 153 - Auto Engine Repair **Credits:** 4
- AUT 230 - Advanced Light/Medium Duty Diesel Diagnosis 1500-4500 Series **Credits:** 4
- AUT 231 - Auto Engine Diagnostics **Credits:** 5

Program Electives

Select 2 courses from the following:

- IPT 261 - Machine Shop **Credits:** 3
- MTC 105 - Introduction to Motorcycle and UTV Technology **Credits:** 3
- MTC 215 - Motorcycle and UTV Service Procedures **Credits:** 3
- WLD 112 - Oxyacetylene Welding for Non-Welding Majors **OR** WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits:** 2

Program Outcomes

Upon successful completion of the Automotive Master Technician Certificate program, the learner will be able to:

1. Identify the parts and rebuild a basic engine and a modified performance engine.
2. Explain and diagnose electrical circuits, electrical components, and computer related problems.
3. Rebuild an automatic transmission and transaxle manual transmission, and transaxle driveline and differential.
4. Replace steering and suspension components and align a front-end.
5. Diagnose and repair automotive air conditioning and heating systems.
6. Tune up, adjust and diagnose an internal combustion engine system.
7. Diagnose, remove, and replace an entire automotive brake system including ABS and traction control system.

Automotive Technician (MLR) Certificate

The purpose of this certificate program is to prepare students with the technical skills to obtain direct employment in the automotive industry and to upgrade the skills of individuals already employed in the industry. The courses within this certificate program prepare students for the National Automotive Service Excellence certification examinations which are required for most entry-level employment opportunities in the industry. Upon completion of each course, the student will receive an Award of Completion which will identify the competencies achieved.

Accreditation: This program is accredited by the Automotive Service Excellence Education Foundation (ASE).

Credit Hours Required: 20

Note: *National Automotive Service Excellence (ASE) certification is essential to individuals preparing for positions in the automotive industry. ASE certification requires hands-on working experience as well as completion of written examinations. Two years of post high school educational training, such as that offered in the automotive certificate and degree programs at Yavapai College, may be substituted for up to one year of the hands-on work experience requirement of the ASE certification.*

Program Requirements

- AUT 103 - Automotive/Diesel Preventative Maintenance **Credits:** 4
- AUT 109 - Auto/Diesel Electrical Systems **Credits:** 4
- AUT 123 - Automotive Brakes **Credits:** 4
- AUT 126 - Auto/Diesel Suspension and Steering **Credits:** 4
- AUT 153 - Auto Engine Repair **Credits:** 4

Program Outcomes

Upon successful completion of the Automotive Technician Certificate program, the learner will be able to:

1. Identify, diagnose and repair problems with internal combustion engines.
2. Diagnose and repair basic electrical problems.
3. Remove and replace friction brake pads, friction brake shoes, and bleed a hydraulic system.
4. Identify major components of the automotive suspension and steering system.

Basic Carpentry Certificate

Introduction to carpentry safety, hand and power tool operation, blueprint reading, materials, and layout. Hands-on experience in cutting, fastening, footings, framing, assembly, door/window installation, flooring, and finishing.

Credit Hours Required: 16

Program Requirements - Select and complete one of the following two options

Option 1:

- CBT 100 - Basic Carpentry I **Credits: 8**
- CBT 110 - Basic Carpentry II **Credits: 8**

Option 2:

- CBT 101 - Plan Reading, Drawings, and Codes **Credits: 2**
- CBT 102 - Framing I **Credits: 2**
- CBT 103 - Masonry & Concrete **Credits: 2**
- CBT 104 - Framing II **Credits: 2**
- CBT 105 - Interior Finishes **Credits: 2**
- CBT 106 - Remodeling **Credits: 2**
- CBT 107 - Exterior Finishes **Credits: 2**
- CBT 108 - Trim Work **Credits: 2**

Program Outcomes

Upon successful completion of the Basic Carpentry Certificate program, the learner will be able to:

1. Demonstrate safe operations with construction materials, tools, and equipment.
2. Demonstrate trade-appropriate dress and behavior.
3. Assemble residential home components, from rough to finish.
4. Construct all components of a residential build from rough to finish.
5. Install floors, walls, ceilings, doors and windows for a residential build.

Basic Residential Trades Certificate

The Basic Residential Trades Certificate prepares students to apply basic skills and knowledge in the core trades of residential carpentry, electrical, plumbing, and 3-D concrete printing. Includes NCCER curriculum and instruction in safety, employment, tool usage, measurement, plan reading, codes, supplies, equipment, fixtures, installations, and finishes in these core trades. Also includes assembly, operation and maintenance of a 3-D concrete printer in residential home building.

Credit Hours Required: 28

Program Requirements

- CBT 100 - Basic Carpentry I **Credits: 8**
OR CBT 101, CBT 102, CBT 103, and CBT 104
- CBT 110 - Basic Carpentry II **Credits: 8**
OR CBT 105, CBT 106, CBT 107, and CBT 108
- CBT 115 - Basic Residential Electrician **Credits: 3**
- CBT 120 - Basic Residential Plumbing **Credits: 5**
- CBT 250 - Introduction to 3-D Concrete Printing **Credits: 4**

Program Outcomes

1. Demonstrate safe operations with construction materials, tools, and equipment.
2. Demonstrate trade-appropriate dress and behavior.
3. Assemble residential home components related to carpentry, electrical, and plumbing, from rough to finish.
4. Construct all components of a residential build from rough to finish.
5. Install and finish floors, walls, ceilings, doors and windows for a residential build.
6. Install electrical and plumbing conduits, wires, and fixtures.

Basic Tax Certificate

The Basic Tax certificate prepares the student for an entry-level position in a tax preparation enterprise or a variety of business settings where knowledge of taxation and accounting practices is required.

Credit Hours Required: 18

Note: *This program can be completed entirely online.*

Program Requirements

- ACC 115 - Basic Tax Planning **Credits:** 3
- ACC 117 - Advanced Tax Planning and Preparation **Credits:** 3
- ACC 121 - Introductory Accounting **Credits:** 3
- ACC 131 - Principles of Accounting I **Credits:** 3
- ACC 296 - Internship: Accounting **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3

Program Outcomes

Upon successful completion of the Basic Tax Certificate program, the learner will be able to:

1. Perform financial accounting functions using proper format and procedure based on Generally Accepted Accounting Principles (GAAP) and the International Financial and Reporting Standards (IFRS).
2. Prepare and interpret financial statements and reports for service and merchandising companies.
3. Prepare complex tax returns and communicate the effects of tax rules for individuals, partnerships and corporations.
4. Use current technology and software applications to input, manage, interpret and communicate financial information.

Behavioral Health Technician Certificate

The Behavioral Health Technician Certificate will provide students with a foundational study of human behavior and prepare them to assist, as part of a clinical team, in the care of individuals and families dealing with mental illness, comorbid medical conditions, and challenges that may be related to substance use/addiction and trauma histories. The program includes courses designed to provide students with the skills necessary to deliver essential behavioral health and social services. The core focus of the program is practical training and service-learning experiences.

Credit Hours Required: 18

Program Requirements

- BHS 150 - Introduction to Behavioral Health and Social Services **Credits: 3**
- BHS 155 - Professional Resiliency and Well-Being **Credits: 3**
- BHS 160 - Ethical, Legal and Professional Issues in Behavioral Health and Social Service **Credits: 3**
- BHS 165 - Applied Therapeutic Communication Skills **Credits: 3**
- BHS 170 - Case Management and Clinical Documentation **Credits: 3**
- BHS 180 - Child, Family, and Adult Advocacy **Credits: 3**

Program Outcomes

1. Distinguish the role, function, and responsibilities of various mental health professions.
2. Assess the comprehensive bio-psycho-social needs of diverse client populations in behavioral health and social service settings.
3. Practice methods to resolve current symptoms and prevent future effects of burnout, traumatic stress, and compassion fatigue.
4. Manage individual cases, as part of a multidisciplinary team, in a fashion that best serves the patient and simultaneously protects the practitioner.
5. Develop, implement, and document treatment plans in collaboration with a multidisciplinary team.
6. Evaluate and practice evidence-based behavioral health interventions using assessment and outcome measures.
7. Demonstrate ethical interpersonal and communication skills essential in establishing and maintaining relationships.

Bone Densitometry Certificate

The Bone Densitometry (BD) program is comprised of two courses designed as facilitated and self-directed learning for radiologic professionals seeking to enhance their careers. Participants must be in good standing with the American Registry of Radiologic Technologists (ARRT). The program, which can be completed in one semester, offers both didactic coursework and clinical skills experiences necessary to prepare the student to challenge the ARRT post-primary examination.

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Note: For the application and detailed program information, visit www.yc.edu/radiology.

Credit Hours Required: 6

Note: This program can be completed entirely online.

Program Requirements

- ICE 150 - Bone Densitometry Certification **Credits:** 3
- ICE 155 - Bone Densitometry Clinical Education **Credits:** 3

Program Outcomes

Upon successful completion of the Bone Densitometry Certificate program, the learner will be able to:

1. Demonstrate the clinical competency required for an entry-level bone densitometry technologist, including proficiency in imaging techniques, patient care and adherence to safety standards.
2. Make informed decisions regarding imaging protocols, positioning adjustments, and procedural modifications to accommodate diverse patient needs.
3. Exhibit the expertise and clinical competence required to challenge the American Registry of Radiologic Technologists (ARRT) post-primary certification examination.

Bookkeeping Certificate

The Bookkeeping certificate prepares students for entry-level positions in a variety of business and office settings where basic knowledge of bookkeeping is required.

This certificate provides the foundation for several other certificate programs: Administrative Professional, Advanced Bookkeeping, Basic Tax and Accounting Assistant.

Credit Hours Required: 9

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Note: *This program can be completed entirely online.*

Program Requirements

- ACC 115 - Basic Tax Planning **Credits:** 3
- ACC 121 - Introductory Accounting **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3

Program Outcomes

Upon successful completion of the Bookkeeping Certificate program, the learner will be able to:

1. Perform financial accounting functions using proper format and procedure based on Generally Accepted Accounting Principles (GAAP).
2. Prepare and interpret financial statements and reports for service and merchandising companies.
3. Prepare basic tax returns and communicate the effects of tax rules for individuals, partnerships and corporations.
4. Use current technology and software applications to input, manage, interpret and communicate financial information.

Brewing Technology Certificate

The Brewing Technology Certificate provides students with the knowledge and skills to enter into the brewing industry in entry-level positions. These courses include brewing equipment and maintenance, beer production, styles, and food safety principles.

Credit Hours Required: 17

Program Requirements

- BRW 100 - Essential Elements of Brewing **Credits:** 1
- BRW 110 - Brewing Equipment and Maintenance **Credits:** 4
- BRW 130 - Beer Production I **Credits:** 3
- BRW 140 - Beer Production II **Credits:** 3
- BRW 150 - Science of Brewing **Credits:** 2
- BRW 192 - Draught Systems **Credits:** 1
- BRW 195 - Brewing Practicum **Credits:** 3

Program Outcomes

1. Explain the four-essential brewing raw materials; malt, hops, water, and yeast.
2. Explain the basic technologies and manufacturing processes required to transform the four essential raw materials into forms suitable for brewing.
3. Demonstrate an ability to measure, report, and interpret the basic process analytics required in a brewing context (e.g., brewhouse performance, bitterness, recovery, etc.)
4. Identify the composition and processing regimes required to produce various traditional styles of beer.
5. Explain the unit processes leading from raw materials to packaged beer.
6. Demonstrate the ability to design and brew a beer that meets generally accepted standards.
7. Analyze the chemical and physical properties of beer for quality control.

Business Foundations Certificate

The Business Foundations Certificate provides students with a comprehensive understanding of core business principles, preparing them for success in various business environments. The program covers essential topics, including marketing, business law, organizational behavior, management, and business communication. This certificate is designed to build a strong foundational skill set that can be applied to supervisory roles or further academic pursuits within business programs.

Credit Hours Required: 15

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Note: *This program can be completed entirely online.*

Program Requirements

- BSA 237 - Legal Environment of Business **Credits: 3**
- MGT 140 - Organizational Behavior **Credits: 3**
- MGT 220 - Principles of Management **Credits: 3**
- MGT 233 - Business Communication **Credits: 3**
- MKT 240 - Principles of Marketing **Credits: 3**

Program Outcomes

Upon successful completion of the Business Foundations certificate program, the learner will be able to:

1. Analyze and synthesize information through critical thinking.
2. Apply written, oral, and interpersonal skills in business settings.
3. Use the management principles of planning, organizing, leading, and controlling to solve common management issues.

Cisco Networking Specialist Certificate

The Cisco Networking Specialist certificate is designed for students to install and support medium to large computer networks with an emphasis on configuration of Cisco routers and switches. This program prepares students for the Cisco Certified Network Associate (CCNA) certification exam.

Credit Hours Required: 21

Program Requirements

- CNT 101 - Networking and Cybersecurity Fundamentals **Credits:** 4
- CNT 110 - A+ Computer Technician Certification **Credits:** 4
- CNT 140 - Cisco Routing and Switching I **Credits:** 4
- CNT 150 - Cisco Routing and Switching II **Credits:** 3
- CNT 160 - Cisco Routing and Switching III **Credits:** 3
- CNT 190 - Programming and Scripting for Network Admins **Credits:** 3

Program Outcomes

Upon successful completion of the Cisco Networking Specialist Certificate program, the learner will be able to:

1. Describe and configure the hardware and software used in a medium to large-sized computer network.
2. Maintain and repair personal computers.
3. Describe network protocols and perform basic network device configuration.
4. Configure Cisco routing, switching, and wireless technologies.
5. Configure advanced routing and network security.
6. Write and debug programs and scripts for application in a network environment.

Commercial Driver Training Certificate

Prepares the student to take the Arizona Department of Transportation (ADOT) commercial drivers license (CDL) permit exam, and to complete 30 hours of driver training needed to pass the ADOT CDL Class A, B, or C commercial license road test.

Credit Hours Required: 17-18

Program Requirements

- CDT 250 - Commercial License Prep **Credits:** 1
 - *Note: If the student has a valid CDL permit this requirement will be waived.*
- CDT 255 - Commercial Behind the Wheel **Credits:** 17

Program Outcomes

Upon successful completion of the Commercial Driver Training Certificate program, the learner will be able to:

1. Prepare for successful completion of ADOT Commercial Class A,B, or C learner permit.
2. Take ADOT Commercial Class A, B, or C Learner permit.
3. Explain and show all items on the commercial Pre Trip inspection check list.
4. Demonstrate competency in ADOT determined road test skills.

Community Health/Critical Care Paramedic

The Community Health/Critical Care Paramedic Certificate is designed to provide the knowledge, skills and ability to synthesize standard of care and expanded scope of practice with comprehensive assessment, diagnostic technology, patient advocacy, ethical and professional behaviors, to practice patient-centered evidence-based paramedicine in the community, clinical, out-of-hospital, and interfacility transport settings.

Credit Hours Required: 16

Note: *There are special admission requirements for the Community Health/Critical Care Paramedic certificate program, including program admission and one of the following certifications: NREMT - P State of Arizona OR EMCT - Paramedic RN NP PA MD NREMT - P State of Arizona OR EMCT - Paramedic RN NP PA MD.*

Program Requirements (16 credits)

- EMS 290 - Pediatric Emergencies Prehospital Professionals Initial Provider **Credits: 2**
- EMS 292 - Critical Care Paramedicine **Credits: 8**
- EMS 294 - Community Health Paramedicine **Credits: 4**
- EMS 298 - Tactical Emergency Casualty Care **Credits: 2**

Program Outcomes

Upon successful completion of the Community Health/Critical Care Paramedic Certificate program, the learner will be able to:

1. Demonstrate ethical and professional behaviors consistent with Critical Care Paramedicine, Community Health Paramedicine, and Tactical Emergency Casualty Care (TECC) Paramedicine and expanded scope of practice.
2. Integrate the pathophysiological significance of comprehensive assessment findings to manage Critical Care and high-risk patients.
3. Synthesize Critical Care Paramedicine, Community Health Paramedicine, and TECC Paramedicine standard of care and expand the scope of practice to perform a comprehensive patient assessment.
4. Integrate pathophysiologic principles, epidemiology, and comprehensive assessment to formulate a differential diagnosis for patients in critical care settings.
5. Utilize diagnostic technology and resources to interpret lab values of Critical Care and high-risk patients.
6. Integrate the pathophysiological significance of comprehensive patient assessment findings to implement a management plan according to Critical Care Paramedicine, Community Health Paramedicine, and TECC Paramedicine to expand the scope of practice.
7. Synthesize Community Paramedicine standard of care and expand the scope of practice to manage medical conditions, behavioral health, end-of-life situations, special needs, and home health care.
8. Differentiate the levels of threat and perform comprehensive trauma patient assessment and treatment according to levels of threat.
9. Manage various trauma conditions according to scope of practice, levels of threat, and TECC guidelines.

Computed Tomography Certificate

The Computed Tomography (CT) Certificate program consists of two courses designed to provide both facilitated and self-directed learning for radiologic professionals who are seeking to enhance their skills and knowledge in advanced imaging techniques, specifically in the area of computed tomography. Participants must be in good standing with the American Registry of Radiologic Technologists (ARRT). The program, which can be completed in one semester and offers both didactic coursework and clinical skills experiences necessary to prepare the student to challenge the ARRT post-primary examination.

Note: For the application and detailed program information, visit www.yc.edu/radiology.

Credit Hours Required: 6

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- ICE 100 - Computed Tomography Certification **Credits:** 3
- ICE 110 - Computed Tomography Clinical Education I **Credits:** 3

Program Outcomes

Upon successful completion of the Computed Tomography Certificate program, the learner will be able to:

1. Demonstrate the clinical competency required for an entry-level computed tomography (CT) technologist, including proficiency in imaging techniques, patient care and adherence to safety standards.
2. Make informed decisions regarding imaging protocols, positioning adjustments, and procedural modifications to accommodate diverse patient needs.
3. Exhibit the expertise and clinical competence required to challenge the American Registry of Radiologic Technologists (ARRT) post-primary certification examination.

Computer Networking Technician Certificate

This certificate is designed to provide students with the skills necessary to install, troubleshoot and support computers and servers in a small to medium-sized computer network. Students are prepared for the CompTIA A+ Certified IT Technician certification. Successful students will have the skills required to gain employment in entry-level positions in the information technology field.

Credit Hours Required: 15

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- CNT 101 - Networking and Cybersecurity Fundamentals **Credits:** 4
- CNT 110 - A+ Computer Technician Certification **Credits:** 4
- CNT 118 - Operating System Fundamentals **Credits:** 3
- **OR** CNT 120 - Introduction to Windows Server **Credits:** 3
- CNT 140 - Cisco Routing and Switching I **Credits:** 4

Program Outcomes

Upon successful completion of the Computer Networking Technician Certificate program, the learner will be able to:

1. Describe and configure the hardware and software used in a small to medium-sized computer network.
2. Maintain and repair personal computers.
3. Perform administrative and troubleshooting tasks on operating systems.
4. Describe network protocols and perform basic network device configuration.

Computer Numerical Controlled (CNC) Machining Certificate

The CNC Machining certificate is designed to prepare students for entry level CNC machining and programming positions. The program offers a series of skill-building courses in CNC machining and CAM programming for the individual desiring full-time employment in the CNC manufacturing industry.

Credit Hours Required: 18

Program Requirements (15 credits)

- CNC 101 - CNC Machine Operator **Credits: 2**
- CNC 102 - CNC Machine Setup **Credits: 2**
- CNC 201 - Computer Aided Programming for CNC **Credits: 3**
- CNC 202 - 3-D Programming and Rapid Prototyping for CNC **Credits: 4**
- MET 250 - Projects in Manufacturing Technology **Credits: 4**

Choose one of the following electives (3 credits):

- EGR 102 - Introduction to Engineering **Credits: 3**
- EGR 180 - CAD (Computer Aided-Drawing) with SolidWorks **Credits: 3**
- IPT 261 - Machine Shop **Credits: 3**
- MET 200 - SolidWorks for Non-Engineers **Credits: 3**

Program Outcomes

Upon successful completion of the Computer Numerical Controlled (CNC) Machining Certificate, the learner will be able to:

1. Program and operate a CNC mill and lathe.
2. Design a product for CNC machining.
3. Reverse engineer a product for 3D replication.
4. Set tools for CNC machining of a given product.
5. Safely utilize machine shop equipment.

Computer Programming Certificate

The Computer Programming Certificate prepares students for employment in entry-level programming fields. Students will experiment and learn a variety of programming languages. Hands-on computer experience is emphasized throughout the program.

Credit Hours Required: 21

Program Requirements

- CSA 282 - Database Concepts **Credits:** 3
- CSC 105 - Introduction to Programming **Credits:** 3
- CSC 113 - Programming: Python **Credits:** 3
- CSC 125 - Programming: C# Fundamentals **Credits:** 3
- CSC 205 - Programming: JavaScript, HTML & CSS **Credits:** 3
- CSC 211 - Programming: PHP and MySQL **Credits:** 3
- CSC 220 - Programming: Java **Credits:** 3

Program Outcomes

Upon successful completion of the Programming Certificate program, the learner will be able to:

1. Apply problem solving skills and the knowledge of computer science in the construction of software systems.
2. Demonstrate effective use of computer programming concepts to code a collection of instructions that perform a specific task.
3. Communicate ideas in a collaborative environment during all stages of software development.

Culinary Arts Fundamentals Certificate

The Certificate in Culinary Arts Fundamentals is designed to equip students with basic skills in culinary arts. The program provides instruction in culinary concepts and terminology, kitchen safety and sanitation, equipment usage, basic nutritional guidelines, standard and metric measurements, food costing, and theory and practice in the production of culinary products. Courses emphasize fundamental cooking techniques and preparation methods for hot foods, breakfast items, salads, sandwiches, dressings, breads and pastries.

Credit Hours Required: 16

Program Requirements

- CUL 101 - Culinary Principles **Credits: 4**
- CUL 102 - Culinary Fundamentals: Hot Foods **Credits: 4**
- CUL 103 - Culinary Fundamentals: Breakfast & Garde Manger **Credits: 4**
- CUL 104 - Culinary Fundamentals: Baking & Pastry **Credits: 4**

Program Outcomes

Upon successful completion of the Culinary Arts Fundamentals Certificate program, the learner will be able to:

1. Identify and apply culinary principles, nutrition practices, safety and sanitation techniques for basic kitchen and food service operation.
2. Identify fruit and vegetable classifications and prepare and use a variety of products.
3. Use kitchen small-wares, equipment, knives and bakery equipment.
4. Apply food costing techniques and recipe conversions using standard and metric measurements.
5. Fabricate meat, fish and poultry products.
6. Produce basic stocks, sauces and soups.
7. Cook poultry, fish and meat products.
8. Produce a variety of cheeses and pastas.
9. Produce dressings for salads and sandwiches.
10. Prepare simple salads, sandwiches, breakfast foods, and hors d'oeuvres appropriate for the food service industry.
11. Prepare basic breads, rolls, cakes, cookies, bakery sauces, icings and fillings.

Cybersecurity Specialist Certificate

The Cybersecurity Specialist certificate is designed to prepare students for entry-level positions in cybersecurity and network administration. Students learn to install, support, secure, and troubleshoot network devices such as routers, switches, and servers. In addition, students learn how to configure virtual private networks, firewalls, and intrusion prevention systems. This program helps prepare students for the CompTIA Security+ and Cisco Certified Network Associate (CCNA) Security certifications and provides a strong knowledge base to pursue advanced cybersecurity certifications such as Certified Information Systems Security Professional (CISSP) and Certified Ethical Hacker (CEH).

Credit Hours Required: 23

Program Requirements

- CNT 101 - Networking and Cybersecurity Fundamentals **Credits: 4**
- CNT 105 - Cybersecurity Principles **Credits: 3**
- CNT 135 - Security+: Implementing and Maintaining Network Security **Credits: 3**
- CNT 140 - Cisco Routing and Switching I **Credits: 4**
- CNT 150 - Cisco Routing and Switching II **Credits: 3**
- CNT 190 - Programming and Scripting for Network Admins **Credits: 3**
- CNT 250 - Securing Network Devices **Credits: 3**

Program Outcomes

Upon successful completion of the Cybersecurity Specialist Certificate program, the learner will be able to:

1. Describe and configure the hardware and software used in a medium to large sized computer network.
2. Describe the terms and technologies that comprise the field of cybersecurity, and implement strategies for managing an information security program.
3. Configure and implement network security.
4. Describe network protocols and perform basic network device configuration.
5. Configure Cisco routing, switching, and wireless technologies.
6. Write and debug scripts for application in a network administration environment.
7. Install, troubleshoot, and monitor a secure network to maintain integrity, confidentiality, and availability of data and devices.

Cybersecurity Technician Certificate

This certificate is designed to provide students with the skills required to install, configure, and secure a small to medium-sized network. Emphasis is on cybersecurity technologies and implementation. Students are prepared for the CompTIA Security+ certification. Successful students will have the skills required to gain employment in entry-level positions in the information technology field specializing in cybersecurity.

Credit Hours Required: 14

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- CNT 101 - Networking and Cybersecurity Fundamentals **Credits: 4**
- CNT 105 - Cybersecurity Principles **Credits: 3**
- CNT 110 - A+ Computer Technician Certification **Credits: 4**
- CNT 135 - Security+: Implementing and Maintaining Network Security **Credits: 3**

Program Outcomes

Upon successful completion of the Cybersecurity Technician Certificate program, the learner will be able to:

1. Describe and configure the hardware and software used in a small to medium-sized computer network.
2. Describe the terms and technologies that comprise the field of cybersecurity, and implement strategies for managing an information security program.
3. Maintain and repair personal computers.
4. Configure and implement network security.

Diesel Technician Certificate

The Diesel Technician Certificate, utilizing a combination of diesel technology and business management skills, is designed for individuals preparing for positions including service managers, technicians, small business owners, and insurance adjusters. It prepares students to take the ASE examinations and become ASE certified technicians.

Credit Hours Required: 36

Program Requirements

- AUT 103 - Automotive/Diesel Preventative Maintenance **Credits:** 4
- AUT 108 - Diesel Engine Repair Technology **Credits:** 4
- AUT 109 - Auto/Diesel Electrical Systems **Credits:** 4
- AUT 124 - Auto/Diesel Manual Drive Trains **Credits:** 4
- AUT 126 - Auto/Diesel Suspension and Steering **Credits:** 4
- AUT 128 - Auto/Diesel Heating and Air Conditioning **Credits:** 4
- AUT 135 - Diesel Braking Systems **Credits:** 4
- AUT 225 - Diesel Engine Performance **Credits:** 4
- AUT 230 - Advanced Light/Medium Duty Diesel Diagnosis 1500-4500 Series **Credits:** 4

Program Outcomes

Upon successful completion of the Diesel Technician Certificate program, the learner will be able to:

1. Analyze and repair automotive and light truck diesel engines.
2. Analyze and repair automotive and light truck diesel fuel system components.
3. Analyze and repair automotive and diesel truck electrical system components.
4. Perform basic service maintenance on diesel cars and diesel trucks.
5. Analyze and repair drive trains.
6. Analyze diesel truck computer controlled systems.

Early Childhood Education Advanced Certificate

A student who completes the Advanced Certificate in ECE is prepared to enter the early care and education profession as a highly skilled teacher of birth-preschool. The Advanced ECE certificate can also fulfill the Early Childhood Endorsement requirements from the Arizona Department of Education to assist elementary education teachers to earn their early childhood endorsement.

Credits Hours Required: 34

Note: A current Arizona fingerprint clearance card is required for students working in the Del E. Webb Family Enrichment Center. A current card in Pediatric First Aid and Safety will be required for graduation.

For certificate completion, 60 face-to-face observation hours and 90-180 practicum hours are required.

Program Requirements

- ECE 200 - Introduction to Early Childhood Education **Credits:** 3
- ECE 202 - Early Childhood Curriculum **Credits:** 3
- ECE 222 - Introduction to the Exceptional Learner **Credits:** 3
- ECE 230 - Language and Literacy Experiences **Credits:** 3
- ECE 234 - Child Development **Credits:** 3
- ECE 240 - Family and Community Partnerships **Credits:** 3
- ECE 250 - Leadership and Management in Early Childhood Programs **Credits:** 3
- ECE 260 - Child Guidance **Credits:** 3
- ECE 270 - Health, Safety and Nutrition **Credits:** 3
- ECE 280 - Observation and Assessment of the Young Child **Credits:** 3
- ECE 291 - Early Childhood Practicum **Credits:** 4

Program Outcomes

Upon successful completion of the Early Childhood Education - Advanced Certificate program, the learner will be able to:

1. Build strong relationships with families through understanding, respecting and valuing the characteristics and cultures of both the families and their communities.
2. Articulate historical perspectives, as well as current trends, in the field of Early Childhood Education.
3. Apply relationship-based, trauma-informed, proactive strategies to promote pro-social development of young children, aged birth through 8 years.
4. Identify strategies to plan and implement instructional practices to promote literacy in children birth-age eight.
5. Use formal and informal observation techniques to document the development and learning in young children.
6. Provide developmentally appropriate, project based opportunities and environments that support the physical, social, emotional, cognitive, language and creative development and learning in children birth-age eight.
7. Apply ethical and professional standards that emphasize reflective practices in working with young children, parents, other professionals and self.
8. Implement basic health, safety, and nutritional practices with young children as required by regulation.

Early Childhood Education Basic Certificate

The Basic Certificate in Early Childhood Education is a point of entry or a continuation of professional development in the field of Early Care and Education. The Basic ECE certificate includes competencies that will prepare a student to apply for the national CDA credential.

Credits earned apply to the ECE Advanced Certificate.

Credit Hours Required: 15

Note: A current Arizona fingerprint clearance card is required for students working in the Del E. Webb Family Enrichment Center. A current card in Pediatric First Aid and Safety will be required for graduation.

Thirty-five face-to-face observation hours are required for certificate completion.

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- ECE 200 - Introduction to Early Childhood Education **Credits:** 3
- ECE 230 - Language and Literacy Experiences **Credits:** 3
- ECE 240 - Family and Community Partnerships **Credits:** 3
- ECE 270 - Health, Safety and Nutrition **Credits:** 3
- ECE 280 - Observation and Assessment of the Young Child **Credits:** 3

Program Outcomes

Upon successful completion of the Early Childhood Education - Basic Certificate program, the learner will be able to:

1. Build strong relationships with families through understanding, respecting and valuing the characteristics and cultures of both the families and their communities.
2. Articulate historical perspectives, as well as current trends, in the field of Early Childhood Education.
3. Apply relationship-based, trauma-informed, proactive strategies to promote pro-social development of young children, aged birth through 8 years.
4. Identify strategies to plan and implement instructional practices to promote literacy in children birth-age eight.

Electric Utility Lineworker Certificate

The Electric Utility Lineworker Certificate is designed to prepare the student for a position as a groundman/pre-apprentice level lineworker who is familiar with the use of tools, materials, and equipment of the electric utility industry. Students will be trained to work safely in power line installation and maintenance, pole climbing and use of tools, truck and equipment operation, and overhead and underground distribution, construction and maintenance of electrical lines.

Credit Hours Required: 36.5

Program Requirements

- CDT 250 - Commercial License Prep **Credits:** 1
- CDT 255 - Commercial Behind the Wheel **Credits:** 17
- EMS 120 - Basic First Aid, CPR and AED **Credits:** .5
- EUT 101 - Basic Electricity For Lineworkers **Credits:** 4
- EUT 120 - Energy Industry Fundamentals **Credits:** 3
- EUT 201 - Introduction to Linework I **Credits:** 2
- EUT 202 - Field Training I (Lineworker) **Credits:** 6
- MAT 100 - Technical Mathematics **Credits:** 3

Program Outcomes

Upon successful completion of the Electric Utility Lineworker Certificate program, the learner will be able to:

1. Explain application of linework equipment, tools, techniques, and safety practices.
2. Demonstrate linework utility truck operation, equipment, tools, techniques, and safety practices
3. Demonstrate basic AC and DC electrical principles.
4. Review the history, regulations, and components of the electrical industry.
5. Develop skills, materials, and industry connections for successful employment.
6. Demonstrate knowledge of commercial driving theory and regulations, a pre-trip inspection, and road test skills.

Electrical Instrumentation Technician Certificate

The Electrical Instrumentation Technician certificate is designed to prepare students for positions in the installation, repair and maintenance of commercial electrical and electronic equipment.

Note: Freeport McMoRan, Inc. and Asarco sponsor mining programs designed to prepare students for direct employment in the mining industry. There are special admission requirements for these programs. Contact (928) 776-2002 for details.

Credits Hours Required: 33

Program Requirements

- AGS 101 - Microcomputers in Agriculture **OR** CSA 126 - Microsoft Office for Windows **Credits: 3**
- AIT 115 - Hydraulic Systems **Credits: 3**
- AIT 120 - Pneumatic Systems **Credits: 3**
- ELT 111 - DC Electrical Systems **Credits: 3**
- ELT 112 - AC Electrical Systems **Credits: 3**
- ELT 126 - Solid State Devices **Credits: 3**
- ELT 162 - Microprocessors & Microcontrollers **Credits: 2**
- ELT 165 - Programmable Logic Controllers **Credits: 2**
- ELT 183 - Digital Circuits **Credits: 3**
- ELT 258 - Electronic Troubleshooting **Credits: 2**
- ELT 271 - Process Control Instrumentation **Credits: 3**
- ELT 272 - Motors and Motor Controls **Credits: 3**

Program Outcomes

Upon successful completion of the Electrical Instrumentation Technician Certificate program, the learner will be able to:

1. Troubleshoot direct and alternating current circuits.
2. Troubleshoot digital, microprocessor and programmable controller-based circuits.
3. Troubleshoot solid state circuits.
4. Troubleshoot process control instrumentation and motor control circuits.
5. Troubleshoot pneumatic and hydraulic systems.
6. Troubleshoot pre-bugged equipment including symptom recognition, fault isolation and repair.
7. Utilize Microsoft Office to create Word, Excel, Access and PowerPoint files.

Electronics - Analog Electronics Certificate

The Analog Electronics Certificate trains students for careers in the operation, maintenance and repair of analog electronic equipment. This certificate provides training in DC systems, AC systems and solid state devices. All instruction emphasizes a hands-on approach utilizing sophisticated test equipment.

Credit Hours Required: 9

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- ELT 111 - DC Electrical Systems **Credits:** 3
- ELT 112 - AC Electrical Systems **Credits:** 3
- ELT 126 - Solid State Devices **Credits:** 3

Program Outcomes

Upon successful completion of the Analog Electronics Certificate program, the learner will be able to:

1. Troubleshoot direct and alternating current circuits.
2. Troubleshoot solid-state circuits.

Electronics - Digital Electronics Certificate

The Digital Electronics Certificate trains students for careers in the operation, maintenance and repair of complex electronic equipment. This certificate provides training in digital systems, microprocessors and programmable controllers. All instruction emphasizes a hands-on approach utilizing sophisticated test equipment.

Credit Hours Required: 5

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- ELT 162 - Microprocessors & Microcontrollers **Credits:** 2
- ELT 183 - Digital Circuits **Credits:** 3

Program Outcomes

Upon successful completion of the Digital Electronics Certificate program, the learner will be able to:

1. Troubleshoot digital, microprocessor and programmable controller-based circuits.

Electronics - Industrial Electronics Certificate

The Industrial Electronics Certificate trains students for careers in the operation, maintenance and repair of industrial electronic equipment. This certificate provides training in process control instrumentation and motors and motor control. All instruction emphasizes a hands-on approach utilizing sophisticated test equipment.

Credit Hours Required: 17

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- ELT 111 - DC Electrical Systems **Credits: 3**
- ELT 112 - AC Electrical Systems **Credits: 3**
- ELT 126 - Solid State Devices **Credits: 3**
- ELT 165 - Programmable Logic Controllers **Credits: 2**
- ELT 271 - Process Control Instrumentation **Credits: 3**
- ELT 272 - Motors and Motor Controls **Credits: 3**

Program Outcomes

Upon successful completion of the Industrial Electronics Certificate program, the learner will be able to:

1. Troubleshoot direct and alternating current circuits.
2. Troubleshoot solid state circuits.
3. Troubleshoot process control instrumentation and motor control circuits.

Electronics Technology Certificate

The Electronics Technology certificate prepares students for a wide variety of careers in Electronics Technology as an electronics technician, communications technician or field service engineer. The certificate provides training in the operation, maintenance and repair of complex electronic equipment. All instruction emphasizes hands-on troubleshooting utilizing sophisticated test equipment.

Credit Hours Required: 21

Program Requirements

- ELT 111 - DC Electrical Systems **Credits:** 3
- ELT 112 - AC Electrical Systems **Credits:** 3
- ELT 126 - Solid State Devices **Credits:** 3
- ELT 162 - Microprocessors & Microcontrollers **Credits:** 2
- ELT 165 - Programmable Logic Controllers **Credits:** 2
- ELT 183 - Digital Circuits **Credits:** 3
- ELT 221 - Communication Systems and Circuits **Credits:** 3
- ELT 258 - Electronic Troubleshooting **Credits:** 2

Program Outcomes

Upon successful completion of the Electronics Technology Certificate program, the learner will be able to:

1. Troubleshoot direct and alternating current circuits.
2. Troubleshoot digital, microprocessor, and programmable controller-based circuits.
3. Troubleshoot solid state circuits.
4. Troubleshoot communication circuits.
5. Troubleshoot pre-bugged equipment including symptom recognition, fault isolation, and repair.

Emergency Medical Technician Certificate

The Emergency Medical Technician certificate provides fundamental knowledge and emergency medical procedures and techniques. Yavapai College offers students entry-level emergency response training with its EMT program. It prepares the student to become an EMT through relevant coursework and extensive hands-on practical training, clinical work, and instructors who have years of experience and know what is needed to succeed. Successful completion of this program will prepare the students for the required Arizona and National Registry EMT exams. Our EMT students have excellent pass rates on the National Registry Exam.

Accreditation: This program is approved by the Arizona Department of Health Services, Bureau of Emergency Medical Services toward certification as an EMT in both the State of Arizona and in the USA.

Credit Hours Required: 16

Note: *Specific program requirements per the State of AZ will be shared with student upon registration.*

Program Requirements

- EMS 143 - Emergency Medical Technician Practicum **Credits:** 2
- EMS 144 - Emergency Medical Technician **Credits:** 10
- EMS 144L - Emergency Medical Technician Lab **Credits:** 4

Program Goals and Objectives

The goal of the EMT programs at Yavapai College is to prepare the student as a competent entry-level EMT.

The three main objectives to reach this goal are as follows:

- Upon completion of the program, the student will demonstrate the ability to comprehend, apply, analyze, and evaluate information relevant to his or her role as an entry-level EMT.
- Upon completion of the program, the student will demonstrate technical proficiency in all the skills necessary to fulfill the role of an entry-level EMT.
- Upon completion of the program, the student will demonstrate personal behavior consistent with professional employer expectations for the entry-level EMT.

These goals and objectives meet with standards from the Arizona Department of Health Services, Bureau of Emergency Medical Services, United States Department of Transportation National Emergency Medical Services Education Standards.

Program Outcomes

Upon successful completion of the Emergency Medical Technician Certificate program, the learner will be able to:

1. Perform one and two person cardiopulmonary resuscitation (CPR) for the adult, child and infant patient according to the latest American Heart Association, Basic Life Support for Healthcare Provider standards.
2. Manage scene safety including personal protective equipment in the workplace.
3. Determine priorities of care.
4. Define the role, scope of practice, legal and ethical responsibilities of an EMT.
5. Assess, manage, and stabilize patients of all ages suffering airway obstructions, respiratory arrest and cardiac arrest with the use of CPR, automated external defibrillator, ventilatory assistance and oxygen.
6. Assess, manage, and stabilize patients of all ages with medical emergencies and emergency childbirth.
7. Assess, manage, and stabilize patients of all ages suffering bleeding, shock, soft tissue injuries, burns, fractures, nervous system injuries, head, chest and abdominal injuries.
8. Prepare the patient for transport to an appropriate medical facility with a minimum of aggravation to the patient's illness or injury.
9. Prepare a comprehensive patient care report for each patient assessed in the hospital clinical setting.

Enology Certificate

The Enology certificate is designed to prepare individuals for careers in the wine industry with an emphasis on wine production. Classroom instruction, laboratory and winery applications of enological principles and practices will be covered.

Credit Hours Required: 23

Program Requirements

- CHM 130 - Fundamental Chemistry **Credits:** 4
- VEN 121 - Wines of the World **Credits:** 2
- VEN 122 - Sensory Evaluation of Wine **Credits:** 2
- VEN 195E - Winemaking Practicum **Credits:** 2
 - *Note: Students must complete VEN 195E in Fall and Spring for a total of 4 credits.*
- VEN 195ES - Winemaking Practicum Summer **Credits:** 2
- VEN 200 - Science of Winemaking I **Credits:** 3
- VEN 201 - Science of Winemaking II **Credits:** 3
- VEN 202 - Science of Winemaking III **Credits:** 3

Program Outcomes

Upon successful completion of the Enology Certificate program, the learner will be able to:

1. Perform steps in the winemaking process.
2. Evaluate wines.
3. Describe legal compliances and business functions in the wine industry.

Fire Service - Advanced Firefighter Certificate

The Advanced Firefighter certificate program is designed to prepare students for positions as career and volunteer firefighters at the entry level. Some students may already be employed at the entry level and are seeking to enhance their knowledge and skills.

Credit Hours Required: 34

Program Requirements

- EMS 143 - Emergency Medical Technician Practicum **Credits:** 2
- EMS 144 - Emergency Medical Technician **Credits:** 10
- EMS 144L - Emergency Medical Technician Lab **Credits:** 4
- FSC 104 - Hazardous Materials First Responder Operations **Credits:** 3
- FSC 105 - Firefighter I & II Certification Academy **Credits:** 12
- FSC 155 - Basic Wildland Firefighting **Credits:** 3

Program Outcomes

Upon successful completion of the Fire Service - Advanced Firefighter Certificate program, the learner will be able to:

1. Explain the proper uses for various equipment/tools, the care and use of fire equipment ladders, and perform basic ladder raises for multi-person ladders.
2. Describe and perform standard hose rolls and carries used by the fire service.
3. Explain the need for proper ventilation.
4. Explain the method and theory of fire cause determination as it applies to the firefighter to include securing the scene and legal considerations.
5. Identify and explain the components and value of automatic sprinkler systems.
6. Perform various drags, lifts, carries, wall breaching, narrow-space manipulation and hoisting techniques directly related to firefighter safety and self-survival.
7. Identify various hazardous materials and their potential dangers.
8. Perform CPR for victims of all ages and demographics.
9. Provide first aid for victims of all ages and demographics.
10. Describe principles and techniques of emergency medical care as performed by the EMT-Basic in accordance with national and state curriculum.
11. Define differences in logistical approaches to wildland and wildfire suppression.

Fire Service Community Risk Reduction Certificate

The Fire Service Community Risk Reduction certificate is designed for those interested in training in the area of risk management with a fire prevention emphasis.

Credit Hours Required: 22

Program Requirements

- FSC 104 - Hazardous Materials First Responder Operations **Credits: 3**
- FSC 135 - Fire Prevention **Credits: 3**
- FSC 210 - Advanced Fire Behavior and Combustion **Credits: 3**
- FSC 225 - Legal Aspects of Emergency Services **Credits: 4**
- FSC 234 - Fire Investigation **Credits: 3**
- FSC 235 - Fire Protection Systems **Credits: 3**
- FSC 241 - Building Construction for Fire Protection **Credits: 3**

Program Outcomes

Upon successful completion of the Fire Service Community Risk Reduction Certificate program, the learner will be able to:

1. Identify various hazardous materials and their potential dangers.
2. Explain issues related to fire prevention and the components and steps of inspection and enforcement.
3. Discuss the legal issues and concerns affecting emergency services.
4. Explain the basic elements of fire dynamics, construction, and fire protection systems as to how they affect origin and cause determination.
5. Describe the function and purpose of fire protection systems.
6. Determine factors and principles related to fire resistance, building codes and fire suppression issues.
7. Use basic terms and concepts associated with the chemistry and dynamics of fire.

Fire Service Company Officer Certificate

The Fire Service Company Officer certificate is designed for those interested in fire service leadership/management and in becoming a fire service officer.

Credit Hours Required: 22

Program Requirements

- FSC 210 - Advanced Fire Behavior and Combustion **Credits: 3**
- FSC 225 - Legal Aspects of Emergency Services **Credits: 4**
- FSC 236 - Occupational Safety and Health for Emergency Services **Credits: 3**
- FSC 238 - Strategy and Tactics **Credits: 3**
- FSC 239 - Fire Department Company Officer **Credits: 3**
- FSC 240 - Principles of Fire and Emergency Service Administration **Credits: 3**
- FSC 241 - Building Construction for Fire Protection **Credits: 3**

Program Outcomes

Upon successful completion of the Fire Service Company Officer Certificate program, the learner will be able to:

1. Discuss the legal issues and concerns affecting emergency services.
2. Prescribe safety procedures for personnel operating in the fire ground.
3. Use basic terms and concepts associated with the chemistry and dynamics of fire.
4. Direct firefighting operations to achieve life safety, property conservation, and environmental protection.
5. Lead functions and processes as the emergency scene commander.
6. Incorporate and manage cost containment, budgeting, data analysis, personnel evaluation, community planning, and departmental and public organization.
7. Determine factors and principles related to fire resistance, building codes and fire suppression issues.

Fire Service Driver/Operator Certificate

The Fire Service Driver/Operator certificate is designed to prepare the student to become a driver/operator of fire service pumping apparatus and hydraulics as it relates to the fire service.

Credit Hours Required: 18

Program Requirements

- FSC 137 - Fire Protection Hydraulics and Water Supply **Credits: 3**
- FSC 235 - Fire Protection Systems **Credits: 3**
- FSC 236 - Occupational Safety and Health for Emergency Services **Credits: 3**
- FSC 238 - Strategy and Tactics **Credits: 3**
- FSC 239 - Fire Department Company Officer **Credits: 3**
- FSC 241 - Building Construction for Fire Protection **Credits: 3**

Program Outcomes

Upon successful completion of the Fire Service Driver/Operator Certificate program, the learner will be able to:

1. Describe principles and characteristics of hydraulics and operate fire hydraulic pumps currently in use in the fire service.
2. Describe the function and purpose of fire protection systems.
3. Prescribe safety procedures for personnel operating in the fire ground.
4. Direct firefighting operations to achieve life safety, property conservation, and environmental protection.
5. Lead functions and processes as the emergency scene commander.
6. Determine factors and principles related to fire resistance, building codes and fire suppression issues.

Fitness Trainer/Instructor Certificate

The Fitness Trainer/Instructor certificate provides students with a cross-disciplinary foundation in the fields of exercise science, sports nutrition, wellness and first aid as applied to personal training and group fitness programming and instruction. It is an ideal path for students needing ACE exam review preparation, for those planning to pursue a bachelor's degree in a similar area of study, or for current professionals seeking to update and enhance their knowledge and skills.

Credit Hours Required: 16

Note: *This program can be completed entirely online.*

Program Requirements

Note: *The following courses with the EXW prefix were previously listed under PHE.*

- EXW 100M - Foundations of Mind-Body Exercise **Credits:** 1
- EXW 130H - Weight Management **Credits:** 3
- EXW 152 - Personal Health and Wellness **Credits:** 3
- EXW 157 - Performance Nutrition **Credits:** 3
- EXW 251 - Integrated and Applied Exercise Science **Credits:** 3
- EXW 252 - ACE Personal Trainer Preparation **Credits:** 3

Program Outcomes

Upon successful completion of the Fitness Trainer/Instructor Certificate program, the learner will be able to:

1. Use F.I.T.T.E. and strength training principles to develop and evaluate the effectiveness of programs for individuals and/or groups that will enhance the five components of fitness.
2. Explain the acute and chronic effects and adaptations of exercise on the cardiovascular and musculoskeletal system.
3. Describe how behavior modification strategies apply to the relationship between diet and exercise within the scope of practice of a personal trainer.
4. Explain medical procedures as they relate to exercise.
5. Integrate mind-body components into the design of personal training sessions.

Fundamentals of Agriculture Science Technology Certificate

The Fundamentals of Agriculture Science Technology Certificate offers students a comprehensive introduction to key sectors of the agricultural industry. This program is designed for individuals seeking to build a solid foundation in applied agricultural practices and technologies, preparing them for entry-level positions or further study in the field.

Credit Hours Required: 18

This certificate is not currently eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- AGS 100 - Introductory Equine Science **Credits:** 4
- AGS 120 - Introduction to the Animal Industry **Credits:** 4
- AGS 215 - Agricultural Mechanics **Credits:** 3
- AGS 250 - Horticulture Fall Production **Credits:** 4 **OR** AGS 252 - Horticulture Spring Production **Credits:** 4
- AGS 274 - Water Management **Credits:** 3

Program Outcomes

Upon successful completion of the Fundamentals of Agriculture Science Technology certificate program, the learner will be able to:

1. Manage an extensive agriculture facility.
2. Explain the history and development of the horse industry.
3. Analyze animal agriculture as a science.
4. Propagate plants both sexually and asexually.
5. Develop a water delivery and quality management system.

Graphic Design Technician Certificate

Completion of this program of study prepares students for entry-level employment in printing and design firms.

Students will develop technical competencies in print, digital imaging, and website design using Adobe Creative Suite. Application of basic design principles.

Credit Hours Required: 28

Program Requirements

- ART 110 - Drawing I **Credits: 3**
- ART 112 - Two-Dimensional Design **Credits: 3**
- ART 130 - Web Design **Credits: 3**
- ART 131 - Graphic Design I **Credits: 4**
- ART 132 - Graphic Design II **Credits: 4**
- ART 137 - Adobe Photoshop I **Credits: 3**
- ART 231 - Digital Illustration **Credits: 4**
- ART 230 - Graphic Design III **Credits: 4**

Program Outcomes

Upon successful completion of the Graphic Design Technician Certificate program, the learner will be able to:

1. Work independently or as part of a team to successfully complete graphic design projects.
2. Develop creative solutions to visual problems.
3. Utilize typography in design solutions.
4. Employ industry standard software.
5. Identify, analyze, synthesize and communicate design principles.
6. Articulate traditional and nontraditional art examples and how those examples affect popular visual literacy.

Gunsmithing - Advanced Certificate

The Advanced Gunsmithing certificate prepares students with highly specialized training in their choice in the areas of CNC machining, competition firearms, and guild firearms production.

Credit Hours Required: 20-21

Note: *Special admission to this program is required. Students should contact an academic advisor or the program director for detailed information.*

Program Requirements

Select two of the three following blocks:

Block 1 - Guild Firearms

- GST 270 - Guild Firearms **Credits:** 10

Block 2 - Competition Firearms

- GST 280 - Competition Firearms **Credits:** 10

Block 3 - CNC Machining

- CNC 101 - CNC Machine Operator **Credits:** 2
- CNC 102 - CNC Machine Setup **Credits:** 2
- CNC 201 - Computer Aided Programming for CNC **Credits:** 3
- CNC 202 - 3-D Programming and Rapid Prototyping for CNC **Credits:** 4

Program Outcomes

Upon successful completion of the Gunsmithing - Advanced Certificate program, the learner will be able to:

1. Safely operate hand and machine tools necessary for gun building.
2. Build traditional sporting firearms at a guild quality level.
3. Build competition firearms that perform at or above accepted levels.
4. Program and operate CNC machinery.
5. Operate CAM programs relevant to the firearms industry.

Gunsmithing Certificate

The Gunsmithing certificate prepares the student for direct employment as a gunsmith in an established shop.

Credits Hours Required: 56

Note: *There is a special admission process for this program. Prospective students should contact an academic advisor for detailed information.*

Program Requirements

- GST 101 - Gunsmithing Fundamentals **Credits:** 12
- GST 151 - Novice Gunsmithing **Credits:** 12
- GST 201 - Intermediate Gunsmithing **Credits:** 12
- GST 251 - Advanced Gunsmithing **Credits:** 12

Program Electives

Select one course from the following each semester for a total minimum of 8 credits:

- GST 191 - Basic Engraving **Credits:** 3
- GST 192 - Advanced Engraving **Credits:** 3
- GST 195A - Gunsmithing Practicum **Credits:** 2
- GST 195B - Gunsmithing Practicum **Credits:** 2
- GST 291 - Professional Engraving **Credits:** 3
- GST 295A - Advanced Gunsmithing Practicum **Credits:** 2
- GST 295B - Advanced Gunsmithing Practicum **Credits:** 2
- CNC 101 - CNC Machine Operator **Credits:** 2
- CNC 102 - CNC Machine Setup **Credits:** 2
- WLD 113 - SMAW/GMAW Welding for Non-Welding Majors **Credits:** 2

Program Outcomes

Upon successful completion of the Gunsmithing Certificate program, the learner will be able to:

1. Safely operate hand and machine tools common to the gunsmithing trade.
2. Use micrometers, indicators, verniers and various gauges for measuring.
3. Develop ballistic data and document research assignments.
4. Disassemble and prepare firearms for metal finishing and reassemble.
5. Identify, disassemble, and assemble different rifle operating systems.
6. Prepare glass bed, install accessories, and apply finish to a rifle stock.
7. Identify different top break shotgun operating systems.
8. Identify, disassemble, and assemble, different handgun operating systems.
9. Install rifle barrels using proven methods to enhance accuracy.
10. Manufacture specialty accessories encountered in the firearms industry.
11. Communicate professionally with customers and vendors.
12. Develop a business plan suitable for a small business loan application.
13. Develop an accurate price list for performing technical services.

HVAC Installation & Maintenance Technician Certificate

The HVAC Installation & Maintenance Technician Certificate provides students with the knowledge and skills needed to enter into the HVAC/Refrigeration industry in entry-level positions.

Credit Hours Required: 24

Program Requirements

- HVA 100 - Introduction to HVAC I **Credits: 3**
- HVA 110 - Introduction to HVAC II **Credits: 3**
- HVA 111 - Basic Electricity for HVAC Technicians **Credits: 3**
- HVA 112 - EPA Refrigerant Certification Prep **Credits: 3**
- HVA 215 - Refrigerant Technology I **Credits: 3**
- HVA 220 - HVAC Circuits and Motors **Credits: 3**
- HVA 225 - Heating Technologies I **Credits: 3**
- HVA 230 - HVAC Troubleshooting **Credits: 3**

Program Outcomes

Upon successful completion of the HVAC Service Technician Certificate program, the learner will be able to:

1. Identify HVAC and Refrigeration equipment and system components, their functions, and their relationship within a system.
2. Describe the fundamentals of electricity and explain its application in HVAC/Refrigeration equipment.
3. Develop and apply competent wiring skills.
4. Troubleshoot, diagnose service systems and perform service tasks.
5. Demonstrate knowledge of safety rules and regulations.

Justice Studies Certificate

The Justice Studies certificate program is designed for students interested in a broad range of criminal justice careers, without a law enforcement focus. The program includes the study of crime and delinquency and the theories, policies and practices of the criminal justice system.

Credit Hours Required: 24

Note: *This program can be completed entirely online.*

Program Requirements

- AJS 101 - Introduction to Administration of Justice **Credits:** 3
- AJS 123 - Ethics and Criminal Justice **Credits:** 3
- AJS 192 - Serial Killers and Mass Murderers **Credits:** 3
- AJS 200 - Current Issues in Criminal Justice **Credits:** 3
- AJS 212 - Juvenile Justice Procedures **Credits:** 3
- AJS 225 - Criminology **Credits:** 3
- AJS 226 - Victimology and Crisis Intervention **Credits:** 3
- AJS 278 - Neuroscience and the Law **Credits:** 3

Program Outcomes

Upon successful completion of the Justice Studies Certificate program, the learner will be able to:

1. Explain the historical development of American criminal law from its English common law roots to the present.
2. Analyze criminal conduct in the context of historical, social, political and legal developments.
3. Analyze the intersection of law, morality, and ethics in modern society.
4. Analyze current issues and trends in crime rates, criminal behavior, and social trends as they impact the criminal justice process.
5. Outline the modern philosophies, organization and treatment/intervention goals of the juvenile justice system.
6. Identify and summarize the various theories of the causes of criminal behavior.
7. Describe the economic and psychological impact of crime on society.
8. Identify and explain victimology and the crisis interventions afforded to victims of crime and their families.
9. Discuss new discoveries in neuroscience and how our increased understanding of the brain is having direct impact on the criminal justice system.
10. Explain theories of causation of serial and mass murderers.

Law Enforcement and Corrections Certificate

The Law Enforcement and Corrections certificate is designed for those interested in training in the law enforcement/corrections field. Emphasis is on the study of crime and delinquency within the criminal justice system, particularly as to the response of law enforcement, corrections and the courts to violations of the law.

The Intensive Police Academy (AJS 292) is accredited by the Arizona Peace Officers Standards and Training Board (AZ POST) in providing Basic Peace Officer training to individuals meeting the requirements of the training board and appointing police agencies. The curriculum includes the study of criminal investigations, police community relations, traffic accident investigation, introduction to administration of justice, law, legal principles, patrol procedures, vehicle operations, report and technical writing, physical conditioning, defense tactics, impact weapons, firearm proficiency and safety, first aid, fundamentals of hazardous materials, stress management and use of force. Students must be screened and appointed by an Arizona Law Enforcement Agency. Upon successful completion of AJS 292, students are eligible to be hired as police officers in the state.

Credit Hours Required: 24 or 34

Notes:

- *Students enrolling in AJS 292 must be screened and appointed by an Arizona Law Enforcement Agency.*
- *Option 1 can be completed entirely online.*

Program Requirements

Select Option 1 or 2:

Option 1

- AJS 101 - Introduction to Administration of Justice **Credits: 3**
- AJS 103 - Public Safety Report Writing **Credits: 3**
- AJS 109 - Substantive Criminal Law **Credits: 3**
- AJS 123 - Ethics and Criminal Justice **Credits: 3**
- AJS 170 - Forensic Science **Credits: 3**
- AJS 230 - The Police Function **Credits: 3**
- AJS 240 - The Correction Function **Credits: 3**
- AJS 260 - Procedural Criminal Law **Credits: 3**

Option 2

- AJS 292 - Intensive Police Certification **Credits: 34**

Program Outcomes

Upon successful completion of the Law Enforcement and Corrections Certificate program, the learner will be able to:

1. Explain the historical development of American criminal law from its English common law roots to the present.
2. Analyze criminal conduct in the context of historical, social, political and legal developments.
3. Identify the organization and jurisdiction of local, state and federal law enforcement, courts and correctional systems.
4. Describe the relationships between the three components of the criminal justice system.
5. Summarize the philosophy of legal sanctions and corrections and the historical development of theories of punishment and rehabilitation.
6. Analyze the intersection of law, morality and ethics in our modern society.
7. Summarize the modern scientific tools used in criminal investigation.
8. Analyze the role of the US Supreme Court in defining the Constitutional protections and procedural due process safeguards in the criminal justice system.
9. Describe the economic and psychological impact of crime on society.
10. Write a concise public services report using basic word processing skills.

11. Apply all types, purposes and techniques of patrol procedures.

Legal Office Clerk Certificate

The Legal Office Clerk certificate is designed to prepare students for entry-level clerical positions in law offices.

Credit Hours Required: 18

Notes:

- *The student is expected to have mastered basic keyboarding skills before beginning this program.*
- *This program can be completed entirely online.*

Program Requirements

- BSA 228 - Professional Productivity Solutions **Credits: 3**
- CSA 126 - Microsoft Office for Windows **Credits: 3**
- LAW 100 - Introduction to Paralegal Studies **Credits: 3**
- LAW 102 - Legal Computer Applications **Credits: 3**
- LAW 103 - Ethics and the Law **Credits: 3**
- LAW 107 - Law Office Management **Credits: 3**

Program Outcomes

Upon successful completion of the Legal Office Clerk Certificate program, the learner will be able to:

1. Use computer applications including word processing, database, spreadsheet, presentation, and internet skills for the law office setting. (CSA 126, LAW 102, LAW 107)
2. Define legal terms and describe legal principles in the areas of tort, contract and criminal law. (LAW 100, LAW 107)
3. Describe basic court systems and court procedures. (LAW 100, LAW 107)
4. Create, format, revise, and print letters, memos, tables, and legal documents. (BSA 225, CSA 126, LAW 102, LAW 107)
5. Perform standard office practices including office communications, telephone skills, mailing methods, time management and prioritizing. (BSA 225, LAW 107)
6. Apply office-related professional etiquette skills. (BSA 225, LAW 107)
7. Use multi-tasking and initiative techniques. (BSA 225, LAW 102, LAW 107)
8. Describe legal office procedures. (LAW 100, LAW 107)
9. Complete law office billing. (LAW 102, LAW 107)
10. Use filing systems as they pertain to the legal office. (BSA 225, LAW 102, LAW 107)
11. File legal documents with the courts using docketing procedures. (LAW 107)
12. Identify confidentiality requirements as set forth in the Ethics Rules. (LAW 103, LAW 107)
13. Use the Harvard Law Review Bluebook uniform system of legal citations. (LAW 107)

Legal Paraprofessional Certificate

The Legal Paraprofessional Certificate is designed to meet the educational requirements for students to be eligible to become licensed Legal Paraprofessionals, as well as to provide a robust course of study for those already having a Bachelor's or Associates Degree and who desire to obtain positions as Paralegals in the legal and business world.

Credit Hours Required: 27-30

Core Program Requirements (21 credits)

- LAW 100 - Introduction to Paralegal Studies **Credits:** 3
- LAW 103 - Ethics and the Law **Credits:** 3
- LAW 217 - Legal Research & Writing I **Credits:** 3
- LAW 218 - Legal Research and Writing II **Credits:** 3
- LAW 220 - Civil Procedure I **Credits:** 3
- LAW 221 - Civil Procedure II **Credits:** 3
- LAW 232 - Evidence **Credits:** 3
- Advocacy (3 credits)
 - Students must have 120 hours in the area of advocacy under the supervision of an attorney. Students can pick either course to satisfy this requirement. If there is more than one area of advocacy, students may take LAW 296 up to 6 credits.
- LAW 291 - Trial Advocacy **Credits:** 3
- **OR** LAW 296 - Internship: Paralegal Studies **Credits:** 3

Select one Legal Paraprofessional Concentration and complete the requirements (3-6 credits)

Administrative Law

- LAW 230 - Administrative Law **Credits:** 3

Civil Practice

- LAW 270 - Mediation and Negotiation **Credits:** 3

Criminal Law

- LAW 109 - Substantive Criminal Law **Credits:** 3
- LAW 260 - Procedural Criminal Law **Credits:** 3

Family Law

- LAW 203 - Family Law **Credits:** 3

Juvenile Dependency Law

- LAW 214 - Juvenile Dependency Law **Credits:** 3

Program Outcomes

Upon successful completion of the Legal Paraprofessional Certificate program, the learner will be able to:

1. Demonstrate analytical and judgment abilities as a legal professional.
2. Apply knowledge and understanding of substantive law and legal principles in one or more areas of practice.
3. Produce legal documents that meet professional standards, reflect accurate legal research, and are in correct format.
4. Act in a professional manner consistent with applicable ethical standards.
5. Demonstrate proficiency using software and technology available to the legal profession.

Limited X-Ray Machine Operator Certificate

The Limited X-Ray Machine Operator Certificate is a 24-week program. The certificate program will prepare students for entry level positions as Certified Practical Technologists in Radiology (CPTR), only in the state of Arizona. Students will complete a minimum of 240-hours of clinical education experience and 19 credits of major core courses.

The certificate program is designed around a model of online coursework, as well as a face-to-face laboratory course. Clinical education is a hands-on experience within an assigned clinical setting that provides a foundation to enter the workforce as a Certified Practical Technologist in Radiology.

This career ladder opportunity assists MAs and other healthcare employees in obtaining stackable credentials for job placement within Arizona. If a student chooses to continue their Associate of Applied Science in Radiologic Technology (AAS) degree through Yavapai College, an application for Limited X-Ray Transition Certificate (coming Fall 2025) will be required. All remaining prerequisite courses and the Limited X-Ray Transition Certificate must be completed to be considered for placement.

Credit Hours Required: 23

This certificate is not currently eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Application for Admission to the Limited X-Ray Machine Operator Certificate

A special application is required for admission to the Limited X-Ray Machine Operator Certificate program. It is recommended that students work closely with their advisor to ensure all application requirements are fully met. Refer to the website: www.yc.edu/radiology

Transfer Students

Students transferring from other regionally accredited institutions will have their completed general education coursework evaluated on an individual basis.

Health Declaration

It is essential that all radiology students be able to perform a number of physical activities in the clinical portion of the program. At minimum, students will be required to lift patients, stand for several hours at a time, perform bending activities, and perform fine motor skills with dexterity. The clinical education experience 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 before applying. The technical standards for the program are identified in the application.

Graduation Requirement

All required courses for the Limited X-Ray Machine Operator Certificate must be completed with a minimum grade of 75%.

Licensure

Graduates receiving an Limited X-Ray Machine Operator Certificate are eligible to challenge the American Registry of Radiologic Technology (ARRT) Arizona State Exam for Practical Technologists in Radiology (CPTR). The CPTR has an opportunity to be employed in a variety of healthcare settings such as hospitals, outpatient imaging centers, mobile imaging, and physician offices. Certified Practical Technologists of Radiology function within their legal scope of practice set forth by Arizona state, the American Society of Radiologic Technologists (ASRT) Practice Standards, and the American Registry of Radiology Technology (ARRT) Standard of Ethics. The Limited X-Ray Machine Operator Certificate provides the articulation foundation for advanced placement within the Radiologic Technology AAS degree offered at Yavapai College.

Transfer

Generally, 64 credits from community colleges are transferable to Arizona public universities: specific articulation information is available through AZTransfer at www.aztransfer.com

Pre-Entry Requirements

HESI A-2 Entrance Exam is required prior to consideration for placement into the Limited X-Ray Machine Operator Certificate. More information can be found at www.yc.edu/radiology

Program Requirements

Biology Requirement (4 credits)

Biology coursework must be completed within the last ten years.

- BIO 160 - Intro to Human Anatomy and Physiology **Credits: 4**
OR BIO 201 - Human Anatomy and Physiology I **Credits: 4**

Limited X-Ray Machine Operator Core (19 Credits)

- RAD 100 - Introduction to Medical Imaging **Credits: 2**
- RAD 101 - Limited Radiographic Positioning I **Credits: 3**
- RAD 102 - Limited Radiographic Positioning Lab I **Credits: 2**
- RAD 135 - Radiation Physics and Equipment **Credits: 3**
- RAD 158 - Radiographic Image Production **Credits: 2**
- RAD 161 - Radiology Clinical Education I **Credits: 3**
- RAD 170 - Radiology Patient Care and Pharmacology **Credits: 2**
- RAD 175 - Radiation Biology and Protection **Credits: 2**

Program Outcomes

Upon successful completion of the Limited X-Ray Machine Operator program, the learner will:

1. Demonstrate the clinical competency expected of entry-level limited x-ray machine operator.
2. Communicate effectively within the radiologic science industry.
3. Demonstrate critical thinking and problem-solving skills.
4. Exhibit professional behavior in alignment with the ethical and professional standards of radiologic science.

Limited X-Ray Transition Certificate

The Limited X-Ray Transition Certificate is comprised of two courses designed for the Limited X-Ray Machine Operator student who wishes to complete the Radiologic Technology AAS. Students who have completed the Limited X-Ray Machine Operator Certificate will be eligible, within two years of completion, to apply for placement into the third semester of the Radiologic Technology AAS Program.

More information can be found at www.yc.edu/radiology

Credit Hours Required: 5

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Note: *There are special requirements for admission to the Limited X-Ray Transition Certificate. It is recommended that students work closely with their advisor to ensure all application requirements are fully met. The application can be found at the Radiology website: www.yc.edu/radiology.*

Program Requirements

- RAD 103 - Radiographic Positioning II Advanced Placement **Credits:** 3
- RAD 104 - Radiographic Positioning Lab II Advanced Placement **Credits:** 2

Program Outcomes

Upon successful completion of the Limited X-Ray Transition Certificate program, the learner will:

1. Demonstrate the positioning competency expected of entry-level radiologic technologists.
2. Communicate effectively within the radiologic science industry.
3. Demonstrate critical thinking and problem-solving skills.

Magnetic Resonance Certificate

The Magnetic Resonance (MRI) Certificate program consists of two courses designed to provide both facilitated and self-directed learning for radiologic professionals seeking to advance their skills and knowledge in advanced imaging techniques specific to magnetic resonance imaging. Participants must be in good standing with the American Registry of Radiologic Technologists (ARRT). The program, which can be completed in one semester, offers both didactic coursework and clinical skills experiences necessary to prepare the student to challenge the ARRT post-primary examination.

Note: For an application packet and detailed program information, visit www.yc.edu/radiology.

Credit Hours Required: 6

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- ICE 200 - Magnetic Resonance Certification **Credits:** 3
- ICE 210 - Magnetic Resonance Clinical Education I **Credits:** 3

Program Outcomes

Upon successful completion of the Magnetic Resonance Certificate program, the learner will be able to:

1. Demonstrate the clinical competency required for an entry-level MRI technologist, including proficiency in imaging techniques, patient care and adherence to safety standards.
2. Make informed decisions regarding imaging protocols, positioning adjustments, and procedural modifications to accommodate diverse patient needs.
3. Exhibit the expertise and clinical competence required to challenge the American Registry of Radiologic Technologists (ARRT) post-primary certification examination.

Management - Entrepreneurship Principles and Practice Certificate

The Management - Entrepreneurship Principles and Practice Certificate prepares students to embark on the journey of owning a business, and the knowledge and skills needed for launching and growing the new venture.

Credit Hours Required: 24

Program Requirements

- MGT 183 - Managing Business Finances **Credits:** 3
- MGT 188 - Competitor Differentiation **Credits:** 3
- MKT 280 - Marketing Tactics and Techniques **Credits:** 3
- MGT 281 - High Performance Management **Credits:** 3
- MGT 283 - Operations Management **Credits:** 3
- MGT 285 - Growing your Business **Credits:** 3
- MGT 288 - Business Plan Development **Credits:** 3

Program Electives

Select a minimum of 3 credit hours from the following courses:

- BSA 228 - Professional Productivity Solutions **Credits:** 3
- MGT 120 - Supervision Techniques **Credits:** 3
- MGT 190 - Path to Patent **Credits:** 3
- MGT 195 - Introduction to Trademarks **Credits:** 3
- MGT 233 - Business Communication **Credits:** 3

Program Outcomes

Upon successful completion of the Entrepreneurship Principles and Practice Certificate, the learner will be able to:

1. Identify requirements for planning, developing, and launching a small business.
2. Identify how different functional areas of an organization work together.
3. Describe the process for analyzing and marketing a business opportunity.
4. Develop a comprehensive Business Plan.
5. Demonstrate understanding of essential workplace skills.

Management - Foundations of Leadership Certificate

The Management - Foundations of Leadership Certificate is designed to provide aspiring leaders and early-career professionals with the essential skills and knowledge required to excel in leadership roles across various organizational settings. This online certificate program focuses on laying a strong foundation in leadership principles, emphasizing practical skills and real-world applications. Coursework covers basic leadership theories, effective communication, team collaboration, problem-solving, and ethical decision-making.

Credit Hours Required: 3

Note: *This program can be completed entirely online.*

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- LDR 111 - Leadership & Innovation **Credits: 1**
- LDR 112 - Leadership & Collaboration **Credits: 1**
- LDR 113 - Leadership & Communication **Credits: 1**

Program Outcomes

Upon successful completion of the Foundations of Leadership Certificate, the learner will be able to:

1. Demonstrate the use of leadership skills in various workplace settings.
2. Identify ways to create a work atmosphere that stimulates creativity and innovation.
3. Apply various communication techniques for a leadership position.
4. Identify essential elements of a leadership role.

Management - Strategic Leadership Certificate

The Management - Strategic Leadership Certificate prepares students for leadership positions within businesses of all sizes. This certificate program will provide students with knowledge and skills needed in entry- and mid-level positions. Coursework covers team dynamics, critical thinking, organizational motivation, strategic and transfer leadership, conflict resolution and ethics.

Credit Hours Required: 9

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- LDR 201 - Leadership Essentials **Credits:** 3
- LDR 202 - Strategic Leadership **Credits:** 3
- LDR 203 - Organizational Leadership **Credits:** 3

Program Outcomes

Upon successful completion of the Strategic Leadership Certificate program, the learner will be able to:

1. Apply practical problem solving to achieve the best organizational outcomes.
2. Utilize tools of leadership related to strategic decision-making.
3. Lead and manage diverse human capital.
4. Communicate in a professional manner using different communication channels and styles.

Management Certificate

The Management Certificate provides management training to prepare students to apply competencies needed for successful performance in management occupations. The program is designed for those seeking to update or develop essential management skills for the workplace and is available in two concentrations: Organizational Management and Retail Management (national endorsement by the WAFC).

Credit Hours Required: 24

Note: *This program can be completed entirely online.*

Program Requirements

- MGT 140 - Organizational Behavior **Credits:** 3
- MGT 220 - Principles of Management **Credits:** 3
- MGT 223 - Human Resource Management **Credits:** 3
- MGT 229 - Strategic Management **Credits:** 3
 - Note: *It is recommended that students take MGT 229 in the final semester of their program.*
- MGT 233 - Business Communication **Credits:** 3
- MKT 240 - Principles of Marketing **Credits:** 3

Select one Management Concentration- A or B- and complete the requirements

A. Organizational Management Concentration

- MGT 120 - Supervision Techniques **Credits:** 3
- MGT 132 - Ethics in Business **Credits:** 3

B. Retail Management Concentration

- ACC 131 - Principles of Accounting I **Credits:** 3
- BSA 228 - Professional Productivity Solutions **Credits:** 3

Program Outcomes

Upon successful completion of the Management Certificate program, the learner will be able to:

1. Apply written, oral and interpersonal skills in business settings.
2. Use the management principles of planning, organizing, leading and controlling to solve common management issues.
3. Identify ethical issues and apply the values of professional responsibility.

Media and Extended Realities Certificate

This program is not currently accepting new students. Please visit <https://www.yc.edu/mxr> for more information.

The Media and Extended Realities Certificate offers students a comprehensive curriculum focused on digital design, extended realities (XR) development, and 3D modeling. Students will learn about architecture, lighting, sound design, hardware components for XR, 3D visualization software, and will culminate their studies with an experiential capstone project. This program equips graduates with the skills and knowledge necessary for a career in the field of digital design and extended realities.

Credit Hours Required: 33

Note: *This program can be completed entirely online.*

Program Requirements (33 credits)

- ART 130 - Web Design **Credits:** 3
- ART 233 - User Experience Design **Credits:** 3
- CSC 105 - Introduction to Programming **Credits:** 3
- CSC 125 - Programming: C# Fundamentals **Credits:** 3
- MET 200 - SolidWorks for Non-Engineers **Credits:** 3
OR EGR 180 - CAD (Computer Aided-Drawing) with SolidWorks **Credits:** 3
- MXR 110 - Digital Environmental Design **Credits:** 3
- MXR 210 - Programming for Extended Realities **Credits:** 3
- MXR 220 - 3D Simulation and Visualization **Credits:** 3
- MXR 230 - Advanced XR Projects **Credits:** 3
- VGD 151 - 3D Modeling and Animation **Credits:** 3
- VGD 180 - Game Theory and Design Principles **Credits:** 3

Program Outcomes

Upon successful completion of the Media and Extended Realities Certificate program, the learner will be able to:

1. Create immersive environments using fundamental architectural principles including temporal and narrative pacing, and lighting and sound design.
2. Deploy extended reality (XR) applications using industry-standard platforms and devices.
3. Craft a comprehensive user experience.
4. Create 3D models and assets for use in digital experiences.
5. Utilize industry-standard 3D visualization software.
6. Develop collaboration skills.
7. Develop extended reality (XR) project management skills.

Media Editing and Post-Production Certificate

The Media Editing and Post-Production Certificate prepares students for entry-level employment in the post-production field. Coursework provides hands-on training to create engaging content across platforms including film, television, and social media.

Credit Hours Required: 16

Program Requirements (16 credits)

- FMA 107 - Post-Production I **Credits:** 3
- FMA 119 - Sound Design for Media **Credits:** 3
- FMA 138 - VFX and Motion Graphics **Credits:** 3
- FMA 139 - Fundamentals of Video Editing **Credits:** 3
- FMA 207 - Post-Production II **Credits:** 3
- FMA 239 - Post-Production Workflow **Credits:** 1

Program Outcomes

Upon successful completion of the Media Editing and Post-Production Certificate program, the learner will be able to:

1. Create quality media productions, including skills in story development, producing, cinematography, editing, and audio production/post production.
2. Create a short TV or film production including pre-production schedule and budget documentation.
3. Collaborate on media project productions, including working in groups and engaging with stakeholders.
4. Develop content utilizing professional level post-production applications.
5. Describe how to fix footage film for television and media projects.

Media Production Certificate

The Media Production Certificate provides hands-on training for producing well-crafted, engaging content across all platforms including film, television, and social media channels.

Credit Hours Required: 36

Program Requirements

- FMA 100 - Animation Principles **Credits:** 3
OR FMA 113 - Stop Motion Animation
- FMA 102 - Production I **Credits:** 3
- FMA 103 - Screenwriting I **Credits:** 3
- FMA 105 - Production II **Credits:** 3
- FMA 107 - Post-Production I **Credits:** 3
- FMA 110 - Pre-Production **Credits:** 3
- FMA 116 - The Business of Content Creation **Credits:** 3
- FMA 117 - Cinematography and Lighting **Credits:** 3
- FMA 134 - Immersive Transmedia Storytelling **Credits:** 3
- FMA 138 - VFX and Motion Graphics **Credits:** 3
- FMA 139 - Fundamentals of Video Editing **Credits:** 3
- FMA 161 - Sound Design for Stage and Media **Credits:** 3

Program Outcomes

Upon successful completion of the Film and Media Production Certificate program, the learner will be able to:

1. Exhibit a working knowledge of filmmaking equipment.
2. Produce content with motion graphics and animation.
3. Write, produce, and edit a short media production.
4. Utilize team building techniques.
5. Exhibit a working knowledge of the business of content creation.

Medical Assistant Certificate

The Medical Assistant certificate program prepares students for employment in health care offices including primary care and specialty physicians' offices, ambulatory care, and urgent care facilities.

Credit Hours Required: 28

Notes:

- *Students completing the Medical Assistant **certificate** program are eligible to take the National Certified Medical Assistant (NCMA) exam from the National Center for Competency Testing (NCCT).*
- *Biology course must be completed within the last ten years.*

Program Requirements

- AHS 105 - Phlebotomy **Credits:** 2
- AHS 120 - Medical Assistant Administrative Skills **Credits:** 3
- AHS 121 - Medical Assistant Clinical Skills **Credits:** 4
- AHS 130 - Medical Terminology for Patient Care Staff **Credits:** 3
- AHS 140 - Pharmacology for Allied Health **Credits:** 3
- AHS 173 - Legal and Ethical Issues in Healthcare **Credits:** 2
- AHS 240 - Human Disease Process **Credits:** 4
- AHS 295 - AHS Practicum: Medical Assistant **Credits:** 3
- BIO 160 - Intro to Human Anatomy and Physiology **Credits:** 4

Program Outcomes

Upon successful completion of the Medical Assistant certificate program, the learner will be able to:

1. Utilize medical records while upholding HIPAA regulations.
2. Demonstrate administrative and clinical skills.
3. Assist the health care provider in delivering care to clients with multiple health care needs.
4. Identify legal and ethical issues in healthcare.
5. Explain the structure and function of the body system.
6. Apply therapeutic communication skills with health care professionals and patients.

Medical Office Assistant Certificate

The Medical Office Assistant (MOA) certificate prepares students to perform administrative skills in a physician's office. The MOA certificate qualifies students to take the Nationally Certified Medical Office Assistant (NCMOA) exam from the National Center for Competency Testing (NCCT). The program allows students to complete a certificate and seek employment.

Credit Hours Required: 21

Program Requirements

- AHS 100 - Fundamentals of Health Care **Credits:** 3
- AHS 120 - Medical Assistant Administrative Skills **Credits:** 3
- AHS 130 - Medical Terminology for Patient Care Staff **Credits:** 3
- AHS 173 - Legal and Ethical Issues in Healthcare **Credits:** 2
- BIO 160 - Intro to Human Anatomy and Physiology **Credits:** 4
- CSA 126 - Microsoft Office for Windows **Credits:** 3
- MAT 142 - College Mathematics **Credits:** 3

Program Outcomes

Upon successful completion of the Medical Office Assistant Certificate program, the learner will be able to:

1. Utilize medical records while upholding HIPAA regulations.
2. Demonstrate administrative and clinical skills.
3. Assist the health care provider in delivering care to clients with multiple health care needs.
4. Identify legal and ethical issues in healthcare.
5. Explain the structure and function of the body systems.
6. Apply therapeutic communication skills with health care professionals and patients.

Medical Records Technician Certificate

The Medical Records Technician certificate prepares students for employment in a physician's office, acute care setting and/or long-term care setting.

Credit Hours Required: 18

Program Requirements

- AHS 100 - Fundamentals of Health Care **Credits:** 3
- AHS 130 - Medical Terminology for Patient Care Staff **Credits:** 3
- AHS 173 - Legal and Ethical Issues in Healthcare **Credits:** 2
- BIO 160 - Intro to Human Anatomy and Physiology **Credits:** 4
- CSA 126 - Microsoft Office for Windows **Credits:** 3
- AHS 134 - Introduction to Health Information Management **Credits:** 3

Program Outcomes

Upon successful completion of the Medical Records Technician Certificate program, the learner will be able to:

1. Describe the Health Information Management (HIM) process including legal and ethical implications.
2. Define elements in the medical word building system.
3. Correctly spell and pronounce medical terms.
4. Apply basic computer skills.
5. Identify and describe the structure and function of major organs and body systems.
6. Describe the strategies involved in decision making during a job search.

Nursing Assistant Certificate

The Nursing Assistant Certificate program prepares students to take the state competency exams leading to certification or licensure and to work as a nursing assistant.

Credit Hours Required: 6

Note: *There are special admission requirements for the Nursing Assistant Program that must be completed before receiving the Program Director's approval to register for the courses. These include criminal background, health, and drug screenings. For an application packet and detailed program information, visit <http://www.yc.edu/alliedhealth>.*

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- AHS 114 - Nursing Assistant **Credits:** 4
- AHS 114C - Nursing Assistant Clinical **Credits:** 1.5
- AHS 114L - Nursing Assistant Skills Lab **Credits:** .5

Program Outcomes

Upon successful completion of the Nursing Assistant Certificate program, the learner will be able to:

1. Function effectively in the role and within the scope of the nursing assistant.
2. Perform nursing assistant skills safely to meet the needs of diverse populations.
3. Demonstrate effective communication skills with the patients or residents and families.
4. Apply the legal and ethical aspects of the nursing assistant role.

Paramedicine Certificate

The Paramedicine Certificate is a nationally accredited program designed to prepare students to become paramedics. This program is a formal education in such paramedicine topics as anatomy and physiology, pathophysiology, cardiology, pulmonary, pharmacology, pediatrics, geriatrics, hematology, toxicology. Paramedicine builds upon EMT education and includes paramedic scope of practice. Paramedicine is integrated with fire service, law enforcement, ground transport services, flight transport services, search and rescue, hospitals, clinical settings, community paramedicine, and EMS education. There is an Associate of Applied Science (AAS) in Paramedicine available.

Accreditation: This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) with the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP) interpreting and enforcing the CAAHEP standards, and is approved by the Arizona Department of Health Services, Bureau of Emergency Medical Services and Trauma Systems.

Credit Hours Required: 45

Note: *There are special admission requirements for the Paramedicine Degree Program. Applicants to the Paramedic Cohort must submit a specialized application and take an entrance exam. Call 928.776.2288 for details.*

Program Requirements

- BIO 160 - Intro to Human Anatomy and Physiology **Credits: 4**
- EMS 162 - Introduction to Pharmacology for EMS Professionals **Credits: 3**
- EMS 164 - ECG Rhythm Analysis & Interpretation for EMS Professionals **Credits: 3**
- EMS 201 - Advanced Cardiac Life Support Initial Provider in Paramedicine **Credits: 1**
- EMS 202 - Pediatric Advanced Life Support Initial Provider in Paramedicine **Credits: 1**
- EMS 203 - Pre-hospital Trauma Life Support **Credits: 1**
- EMS 239 - Airway and Ventilatory Management in Paramedicine **Credits: 2**
- EMS 252 - Pharmacology in Paramedicine **Credits: 3**
- EMS 254 - Paramedic Practicum I **Credits: 1**
- EMS 265 - Paramedic Practicum II **Credits: 1**
- EMS 267 - Technical Operations in Paramedicine **Credits: 3**
- EMS 269 - Trauma Patient Management in Paramedicine **Credits: 2**
- EMS 271 - Medical Emergencies in Paramedicine I **Credits: 3**
- EMS 271L - Medical Emergencies in Paramedicine Lab **Credits: 2**
- EMS 272 - Medical Emergencies in Paramedicine II **Credits: 3**
- EMS 272L - Comprehensive Patient Assessment in Paramedicine I **Credits: 4**
- EMS 273 - Medical Emergencies in Paramedicine III **Credits: 4**
- EMS 273L - Comprehensive Patient Assessment in Paramedicine II **Credits: 4**

Program Goal

To prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

This goal aligns with standards from the Arizona Department of Health Services, Bureau of Emergency Medical Services, United States Department of Transportation National Emergency Medical Services Education Standards, and the Essentials and Guidelines from the Committee on Accreditation of Emergency Medical Services Programs (CoAEMSP).

Program Outcomes

Upon successful completion of the Paramedicine Certificate program, the learner will be able to:

1. Maintain patient, public, personnel, and personal health, wellness, and safety.
2. Demonstrate personal behaviors consistent with professional standards.
3. Communicate efficiently and effectively with members of diverse populations in a culturally responsive manner.

4. Effectively function within a multi-disciplinary healthcare system, recognizing roles, responsibilities, and scope of practice.
5. Efficiently synthesize and evaluate multiple sources of information.
6. Perform comprehensive patient assessment.
7. Develop a working differential diagnosis using multiple sources of information.
8. Make informed, autonomous decisions in both clinical and uncontrolled settings.
9. Guide and support the healthcare team, navigating interpersonal dynamics.
10. Effectively manage patients.

Phlebotomy Technician Certificate

The Phlebotomy Technician Certificate will prepare students to work as phlebotomists. Upon completing, students will be eligible to take the national phlebotomy certification exam.

Credit Hours Required: 8

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- AHS 100 - Fundamentals of Health Care **Credits:** 3
- AHS 105 - Phlebotomy **Credits:** 2
- AHS 296 - Internship: Allied Health Services **Credits:** 3

Note: *Students must enroll in AHS 296 within 3 semesters of completing AHS 105, as well as complete all Phlebotomy requirements and receive program director permission prior to enrollment.*

Program Outcomes

Upon successful completion of the Phlebotomy Technician Certificate program, the learner will be able to:

1. Safely demonstrate basic phlebotomy skills in a working environment.
2. Manage medical records upholding security and privacy standards as outlined in HIPAA regulations.
3. Explain the structure and function of the body systems.
4. Identify legal and ethical issues in healthcare.
5. Apply effective communication skills with healthcare professionals and patients.

Plumbing Technician Certificate

The Plumbing Technician Certificate is designed to provide the essential skills required of an entry-level employee in the residential plumbing industry. Training in various aspects of the construction and plumbing industry include: hand and power tool operation, blueprints, materials, and layouts. Students will learn to install and repair residential plumbing systems which include new construction, renovations, wells, and septic systems. Program will also address plumbing system design, calculations, safety, testing, and applicable codes and standards.

Credit Hours Required: 16

Program Requirements

- CBT 100 - Basic Carpentry I **Credits: 8**
OR CBT 101, CBT 102, CBT 103, and CBT 104
- CBT 112 - Plumbing Codes & Standards, Blueprint, and Design **Credits: 2**
- CBT 120 - Basic Residential Plumbing **Credits: 5**
- CBT 212 - Drain, Waste, and Vent Systems **Credits: 1**

Program Outcomes

Upon successful completion of the Plumbing Technician Certificate program, the learner will be able to:

1. Perform soil, top-out, trim installation, and inspection of residential plumbing systems.
2. Interpret and explain basic plumbing regulations, codes, and standards.
3. Explain and install drain-waste-vent systems.
4. Prepare, calculate, and interpret residential plumbing designs and blueprints.
5. Identify the different piping and fittings used in the plumbing industry.

Practical Nursing Fast Track Certificate

The Practical Nursing Fast Track Certificate program provides students with the theory and skills required to practice as a practical nurse in acute care, extended care, and intermediate care settings. The program of study combines nursing theory lectures with clinical experiences in a variety of client care settings including hospitals, nursing homes and other healthcare agencies. Graduates are eligible to take the National Council Licensure Examination (NCLEX-PN) to become a licensed practical nurse (LPN).

Application Requirements

Prior to program application, the applicant must have an active Arizona certification or licensure as a CNA or LNA, or MMP, with one year of full-time or two years of part-time recent work experience; a successful score on ATI TEAS entrance exam; and high-school diploma or GED. There are special requirements for admission to the Practical Nursing Fast Track Certificate. It is recommended that students work closely with their advisor to ensure all application requirements are fully met. The application can be found at the Allied Health website: www.yc.edu/alliedhealth

Conditional Acceptance

Upon conditional program acceptance, the student must comply with all requirements of the Practical Nursing Fast Track Certificate program. These include criminal background, health, safety, and drug screenings. For detailed program information, visit www.yc.edu/alliedhealth

Health Declaration

It is essential that practical nursing students be able to perform a number of physical activities in the laboratory and clinical portions of the program. At minimum, students will be required to transfer and move clients, stand for several hours at a time, perform bending activities and perform fine motor skills with dexterity. The clinical nursing experience places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting client's 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 applying. The essential skills and functional ability standards for the program are identified in the application.

Licensure

Admission or graduation from the Practical Nursing Fast Track Certificate program does not guarantee licensure to practice nursing. Graduates of the Practical Nursing Fast Track Certificate program are eligible to apply and take the National Council Licensure Exam (NCLEX) for the Practical Nurse (PN). Licensure 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, independently of any program requirements for graduation.

Credit Hours Required: 22

Program Requirements

- LPN 101 - Fundamentals of Practical Nursing Care I **Credits: 4**
- LPN 105 - Development of Practical Nursing **Credits: 2**
- LPN 110 - Application of Practical Nursing I **Credits: 3**
- LPN 115 - Pharmacology for Practical Nursing I **Credits: 2**
- LPN 201 - Fundamentals of Practical Nursing Care II **Credits: 4**
- LPN 205 - Advanced Development of Practical Nursing **Credits: 2**
- LPN 210 - Application of Practical Nursing II **Credits: 3**
- LPN 215 - Pharmacology for Practical Nursing II **Credits: 2**

Program Outcomes

Upon successful completion of the Practical Nursing Fast Track Certificate program, the learner will be able to:

1. Engage in holistic practice that respects the dignity, diversity, and self-determination of adult, obstetric, newborn, and pediatric clients, and their families (Client Centered Care).

2. Collaborate and communicate effectively with clients, families, and members of the interprofessional team to coordinate holistic care (Teamwork and Collaboration).
3. Demonstrate critical thinking skills and evidence-based practice through utilization of the nursing process as a guideline in providing nursing care to meet the physical, mental, and psychosocial health care needs of the adult, obstetric, newborn, and pediatric client (Evidenced-Based Practice).
4. Assist with the evaluation of nursing care based on established outcome criteria (Quality Improvement).
5. Demonstrate skills in client safety, medication administration, the nursing process, and specific client care (Safety).
6. Illustrate use of relevant technology for client care and documentation (Informatics).

Practical Nursing Transition Certificate

The Practical Nursing Transition Certificate is an 8-week transition course designed for the nursing student who wishes to take the NCLEX-PN and begin a career as a practical nurse.

Credit Hours Required: 1.5

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Note: *There are special admission requirements for the LPN certificate program, including admission to the Nursing program and completion of NSG 151, NSG 152, NSG 153, NSG 154, NSG 155, and BIO 205.*

Program Requirements (1.5 credits)

- LPN 190 - Practical Nursing Transition **Credits:** 1.5

Program Outcomes

Upon successful completion of the Practical Nursing Transition Certificate, the learner will be able to:

1. Recognize the client or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for client's preferences, values and needs. (Client Centered Care)
2. Function effectively within nursing and interprofessional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care. (Teamwork and Collaboration)
3. Integrate best current evidence with clinical expertise and client/family preferences and values for delivery of optimal healthcare. (Evidence Based Practice)
4. Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems. (Quality Improvement)
5. Minimize risk of harm to clients and providers through both system effectiveness and individual performance. (Safety)
6. Use information and technology to communicate, manage knowledge, mitigate error and support decision-making. (Informatics)

Production Horticulture Certificate

The Production Horticulture Certificate program is designed to prepare students for potential careers in the horticulture and greenhouse industry including grower, nursery technician, integrated pest management, greenhouse management and entrepreneur.

Credit Hours Required: 32

Program Requirements (32 credits)

- AGS 103 - Plant Biology **Credits:** 4
- AGS 105 - Soils **Credits:** 3
- AGS 107 - Entomology **Credits:** 3
- AGS 156 - Organic Home Gardening **Credits:** 1
- AGS 157 - Community Supported Agriculture **Credits:** 3
- AGS 202 - Summer Horticulture **Credits:** 2
- AGS 215 - Agricultural Mechanics **Credits:** 3
- AGS 250 - Horticulture Fall Production **Credits:** 4
- AGS 252 - Horticulture Spring Production **Credits:** 4
- AGS 255 - Micro Propagation of Plant Tissue **Credits:** 2
- AGS 274 - Water Management **Credits:** 3

Program Outcomes

Upon successful completion of the Production Horticulture Certificate program, the learner will be able to:

1. Manage an extensive agriculture facility.
2. Develop a water delivery and quality management system.
3. Propagate plants sexually and asexually.
4. Develop and implement an integrated pest management system.

Residential Electrical Technician Certificate

The Residential Electrical Technician Certificate provides students with the knowledge and skills needed to enter into the electrical industry in entry level positions. The courses include electrical industry standards, residential drawings, National Electrical Code and installing an electrical system in a residential dwelling.

Credit Hours Required: 19

Program Requirements

- CBT 100 - Basic Carpentry I **Credits:** 8
OR CBT 101, CBT 102, CBT 103, and CBT 104
- CBT 115 - Basic Residential Electrician **Credits:** 3
- ELT 101 - Basic Electricity **Credits:** 4
- ELT 115 - Conduits and Raceways **Credits:** 1
- ELT 220 - National Electrical Codes **Credits:** 3

Program Outcomes

Upon successful completion of the Residential Electrical Technician Certificate program, the learner will be able to:

1. Practice safe residential electrical industry standards.
2. Install complete electrical system for a residential home.
3. Diagnose and repair electrical problems occurring in a residential home.
4. Interpret residential drawings and blueprints.
5. Apply National Electrical Code (NEC) requirements to electrical installations and repairs.

Script Supervisor Certificate

This certificate prepares students for employment as a Script Supervisor. This hands-on certificate covers the duties and skills of the script supervisor from pre-production through production. This includes knowledge of screenwriting format and structure, breaking down the script, department roles and the basic language of continuity including eyelines, space, motion, time, action, and dialogue.

Credit Hours Required: 9

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements (9 credits)

- FMA 102 - Production I **Credits:** 3
- FMA 103 - Screenwriting I **Credits:** 3
- FMA 110 - Pre-Production **Credits:** 3

Program Outcomes

Upon completion of the Script Supervisor Certificate program, the learner will be able to:

1. Exhibit a working knowledge of filmmaking equipment.
2. Create a short TV or film production including pre-production schedule and budget documentation.
3. Create a short screenplay.

Technical Theater in Stagecraft Certificate

The Technical Theater in Stagecraft Certificate is designed to prepare students for a wide range of careers within theatrical operations and production. This hands-on experience working on theatrical productions and events in the performing arts and entertainment industry includes a wide variety of specializations in audio, lighting, set and props design and construction, costuming, hair and wigs, and make-up design.

Credit Hours Required: 16

Program Requirements

- THR 147 - Production Workshop Practicum: Theater Production Crew **Credits:** 1
- THR 160 - Lighting for Stage and Media **Credits:** 3
- THR 161 - Sound Design for Stage and Media **Credits:** 3
- THR 162 - Stagecraft Rigging and Safety **Credits:** 3
- THR 164 - Theater Set and Props Building **Credits:** 3
- THR 165 - Script Analysis **Credits:** 3

Program Outcomes

Upon successful completion of the Technical Theater in Stagecraft Certificate program, the learner will be able to:

1. Demonstrate a general understanding of design and implementation for theatrical arts production areas including scenery, lighting, sound, costumes, and properties.
2. Perform safe construction and installation techniques for technical theater disciplines.
3. Apply professional behavior as part of a team implementing technical theater elements for a production.

Unmanned Aircraft Systems Certificate

The Unmanned Aircraft Systems Certificate prepares students to become professional unmanned aircraft operators.

Credit Hours Required: 27

Program Requirements

- UAS 100 - Introduction to UAS **Credits:** 3
- UAS 103 - UAS Simulations **Credits:** 3
- UAS 110 - UAS Fixed-Wing Systems **Credits:** 4
- UAS 115 - UAS Multirotor Systems **Credits:** 4
- UAS 120 - UAS Sensing Systems **Credits:** 3
- UAS 132 - UAS Flight Operations **Credits:** 4
- UAS 215 - UAS Mapping Systems **Credits:** 3
- UAS 250 - UAS Applications and Analytics **Credits:** 3

Program Outcomes

Upon successful completion of the Unmanned Aircraft Systems Certificate program, the learner will be able to:

1. Describe current UAS capabilities and applications.
2. Describe UAS regulations.
3. Describe basic UAS telemetry and ground station components and functions; install telemetry system on UAS; perform range test.
4. Interpret aerial imagery from nadir and oblique angles.
5. Use critical analysis to accurately select the appropriate sensor, lens, and aircraft for a given mission.
6. Assemble data into a meaningful format to present to industry professionals.
7. Safely fly a drone using approved practices.

Victim Advocacy Certificate

The Victim Advocacy Certificate program prepares students to enter this career field with an understanding of the various duties a victim advocate may perform, the types of victimization an advocate may provide services to, and where victim advocacy functions within the criminal justice and other victim related organizations.

Credit Hours Required: 16

This certificate is not currently eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements

- AJS 101 - Introduction to Administration of Justice **Credits:** 3
- AJS 123 - Ethics and Criminal Justice **Credits:** 3
- AJS 226 - Victimology and Crisis Intervention **Credits:** 3
- AJS 227 - Victim Advocacy **Credits:** 4
- AJS 228 - Gender-Related Violence **Credits:** 3

Program Outcomes

Upon successful completion of the Victim Advocacy Certificate, the learner will be able to:

1. Identify the services and resources available to victims of gender-related violence.
2. Describe the relationship between criminal justice agencies and victim advocacy services.
3. Analyze the traumatic impact of gender-related violence on victims.
4. Explain the differences between community-based advocacy and system-based advocacy.

Video Game Developer Certificate

The Video Game Developer certificate focuses on providing students with skills in high level object oriented programming. Applications used for skill development are 2-D and 3-D video game applications for use on PCs, MACs, Smartphones, the Web, and commercial video game consoles.

Credit Hours Required: 18

Note: *This program can be completed entirely online.*

Program Requirements

- CSC 105 - Introduction to Programming **Credits: 3**
- CSC 125 - Programming: C# Fundamentals **Credits: 3**
- VGD 121 - Video Game Development for Game Engines **Credits: 3**
- VGD 151 - 3D Modeling and Animation **Credits: 3**
- VGD 171 - Video Game Development - Programming **Credits: 3**
- VGD 180 - Game Theory and Design Principles **Credits: 3**

Program Outcomes

Upon successful completion of the Video Game Developer Certificate program, the learner will be able to:

1. Create video games suitable for use on a PC, MAC, or mobile device.
2. Design 3D objects and animations for use in video games.
3. Write error free programming for use in video games.
4. Identify game design theory and principles.
5. Develop Rigged Models with animations for use in video games.

Viticulture Advanced Certificate

The Viticulture Advanced Certificate is designed to prepare individuals for various careers in the grape growing industry. Classroom instruction, laboratory and in-depth field applications of viticultural principles and practices are included in the program of study. Learning outcomes are applied in a 12-acre on-campus teaching vineyard.

Credit Hours Required: 25

Program Requirements

- AGS 105 - Soils **Credits:** 3
- AGS 107 - Entomology **Credits:** 3
- AGS 274 - Water Management **Credits:** 3
- VEN 100 - Introduction to Viticulture **Credits:** 3
- VEN 101 - Establishing a Vinifera Vineyard **Credits:** 3
- VEN 103 - Maintaining a Vinifera Vineyard **Credits:** 4
- VEN 195V - Viticulture Practicum **Credits:** 2
 - *Note: Students must complete VEN 195V in Fall and Spring for a total of 4 credits.*
- VEN 195VS - Viticulture Practicum Summer **Credits:** 2

Program Outcomes

Upon successful completion of the Viticulture Advanced Certificate program, the learner will be able to:

1. Design a site for vitis vinifera production.
2. Maintain crop health.
3. Grow wine grapes.

Viticulture Fundamentals Certificate

The Viticulture Fundamentals certificate is designed to prepare individuals for various careers in the grape growing industry. Classroom instruction, laboratory and field applications of viticultural principles and practices are included in the program of study.

Credit Hours Required: 16

Program Requirements

- AGS 105 - Soils **Credits:** 3
- AGS 274 - Water Management **Credits:** 3
- VEN 100 - Introduction to Viticulture **Credits:** 3
- VEN 101 - Establishing a Vinifera Vineyard **Credits:** 3
- VEN 103 - Maintaining a Vinifera Vineyard **Credits:** 4

Program Outcomes

Upon successful completion of the Viticulture Fundamentals Certificate program, the learner will be able to:

1. Design a site for vitis vinifera production.
2. Maintain crop health.
3. Grow wine grapes.

Welding - Gas Metal Arc Welding Certificate

Prepares students for employment in welding positions requiring competency in the field of Gas Metal Arc Welding. Coursework may upgrade skills and assist in career advancement for currently employed welders.

Credit Hours Required: 24

Program Requirements

- WLD 130 - Oxyacetylene **Credits: 4**
- WLD 140 - Arc I **Credits: 4**
- WLD 145 - Arc II **Credits: 4**
- WLD 156 - Blueprint Reading **Credits: 4**
- WLD 210 - Gas Metal Arc Welding **Credits: 4**
- WLD 250 - Welded Metal Fabrication **Credits: 4**

Program Outcomes

Upon successful completion of the Welding - Gas Metal Arc Certificate program, the learner will be able to:

1. Use welding safety procedures.
2. Interpret welding blueprints.
3. Operate oxyacetylene equipment to weld, cut, braze, and braze weld to industry requirements.
4. Operate shielded metal arc welding equipment to industry requirements.
5. Order, layout, and fabricate material as required by blueprints.
6. Operate gas metal arc welding equipment to industry requirements.

Welding - Gas Tungsten Arc Welding Certificate

Prepares students for employment in welding positions requiring competency in the field of Gas Tungsten Arc Welding. Coursework may upgrade skills and assist in career advancement for currently employed welders.

Credit Hours Required: 24

Program Requirements

- WLD 130 - Oxyacetylene **Credits: 4**
- WLD 140 - Arc I **Credits: 4**
- WLD 145 - Arc II **Credits: 4**
- WLD 156 - Blueprint Reading **Credits: 4**
- WLD 200 - Gas Tungsten Arc Welding **Credits: 4**
- WLD 250 - Welded Metal Fabrication **Credits: 4**

Program Outcomes

Upon successful completion of the Welding - Gas Tungsten Arc Certificate program, the learner will be able to:

1. Use welding safety procedures.
2. Interpret welding blueprints.
3. Operate oxyacetylene equipment to weld, cut, braze, and braze weld to industry requirements.
4. Operate shielded metal arc welding equipment to industry requirements.
5. Order, layout, and fabricate material as required by blueprints.
6. Operate gas tungsten arc welding equipment to industry requirements.

Welding - Pipe Welding Certificate

The Pipe Welding Certificate prepares students for employment in welding positions requiring competency in the field of Pipe Welding. Coursework may upgrade skills and assist in career advancement for currently employed welders.

Credit Hours Required: 24

Program Requirements

- WLD 130 - Oxyacetylene **Credits:** 4
- WLD 140 - Arc I **Credits:** 4
- WLD 145 - Arc II **Credits:** 4
- WLD 156 - Blueprint Reading **Credits:** 4
- WLD 250 - Welded Metal Fabrication **Credits:** 4
- WLD 282 - Pipe Welding I **Credits:** 4

Program Outcomes

Upon successful completion of the Welding - Pipe Welding Certificate program, the learner will be able to:

1. Use welding safety procedures.
2. Interpret welding blueprints.
3. Operate oxyacetylene equipment to weld, cut, braze, and braze weld to industry requirements.
4. Operate shielded metal arc welding equipment to industry requirements.
5. Order, layout, and fabricate material as required by blueprints.
6. Explain proper welding skills for fabricating pipe.

Welding - Structural Welding Certificate

The Structural Welding certificate prepares students for employment in positions requiring competency in the field of welding. Coursework may upgrade skills and assist in career advancement for currently employed welders.

Credit Hours Required: 16

Program Requirements

- WLD 130 - Oxyacetylene **Credits:** 4
- WLD 140 - Arc I **Credits:** 4
- WLD 145 - Arc II **Credits:** 4
- WLD 156 - Blueprint Reading **Credits:** 4

Program Outcomes

Upon successful completion of the Welding - Structural Certificate program, the learner will be able to:

1. Use welding safety procedures.
2. Interpret welding blueprints.
3. Operate oxyacetylene equipment to weld, cut, braze, and braze weld to industry requirements.
4. Operate shielded metal arc welding equipment to industry requirements.

Women's Health Imaging Certificate

The Women's Health Imaging Certificate program is comprised of two courses designed as facilitated and self-directed learning for radiologic professionals seeking a fulfilling career as a mammographer. Participants must be in good standing with the American Registry of Radiologic Technologists (ARRT). The program, which can be completed in one semester, offers both didactic coursework and clinical skills experiences necessary to prepare the student to challenge the ARRT post-primary examination in mammography.

This certificate program meets the required 40-hour initial training outlined by the Mammography Quality Standards Act and Program (MQSA).

Note: For application and detailed program information, visit www.yc.edu/radiology.

Credit Hours Required: 7

This certificate is not eligible for Federal Financial Aid. To explore other financial aid opportunities, please visit YC Admission.

Program Requirements (7 credits)

- ICE 250 - Mammography Initial Training **Credits:** 4
- ICE 255 - Mammography Clinical Education **Credits:** 3

Program Outcomes

Upon successful completion of the Women's Health Imaging Certificate program, the learner will be able to:

1. Demonstrate the clinical competency required for an entry-level mammography technologist, including proficiency in imaging techniques, patient care and adherence to safety standards.
2. Make informed decisions regarding imaging protocols, positioning adjustments, and procedural modifications to accommodate diverse patient needs.
3. Exhibit the expertise and clinical competence required to challenge the American Registry of Radiologic Technologists (ARRT) post-primary certification examination.

Writing for the Screen Certificate

The Writing for the Screen Certificate focuses on storytelling across media, including podcasting, marketing/sales, social media, video games, VR, citizen journalism, education, YouTube, client based content, film and television.

Credits Hours required: 24

Note: *This program can be completed entirely online.*

Program Requirements

- FMA 103 - Screenwriting I **Credits:** 3
- FMA 104 - Podcasting **Credits:** 3
- FMA 121 - Screenwriting II **Credits:** 3
- FMA 131 - Characters, Conflicts and Story **Credits:** 3
- FMA 132 - Citizen Journalism **Credits:** 3
- FMA 133 - Introduction to Media and Cinema **Credits:** 3
- FMA 134 - Immersive Transmedia Storytelling **Credits:** 3
- FMA 135 - Writing for Games and Virtual Reality **Credits:** 3

Program Outcomes

Upon successful completion of the Writing for the Screen Certificate, the learner will be able to:

1. Exhibit a working knowledge of storytelling across mediums.
2. Apply key points of storytelling in cinema to content creation.
3. Create a podcast using journalism principles.
4. Create a screenplay using three act structure with solid characters, conflicts and story.

Course Listings

Accounting

ACC 115 - Basic Tax Planning

Description: Techniques of federal individual, partnership and corporation income tax preparation. Emphasis on tax return preparation, with review of individual income tax law and applications of that law to tax return forms.

Prerequisites: ACC 121 or ACC 131 (may be taken concurrently). Recommended preparation: ACC 131 and ACC 132.

Credits: 3

Lecture: 3

Lab: 0

ACC 117 - Advanced Tax Planning and Preparation

Description: Advanced study in individual, corporate, and partnership taxation.

Prerequisites: ACC 115

Credits: 3

Lecture: 3

Lab: 0

ACC 121 - Introductory Accounting

Description: General ledger bookkeeping and preparing financial statements.

Credits: 3

Lecture: 3

Lab: 0

ACC 122 - Payroll Accounting

Description: Payroll functions for a business including timekeeping techniques, payroll accounting records, check writing, preparation of federal and state payroll reports, insurance reports, and retirement plan reports. Manual recordkeeping and report submission as well as computerized payroll will be covered.

Prerequisites: ACC 121 or ACC 131

Credits: 3

Lecture: 3

Lab: 0

ACC 131 - Principles of Accounting I

Description: U.S. GAAP rules and procedures of accrual accounting applied to the preparation and interpretation of general-purpose financial statements. Principles and procedures of accrual accounting applied to preparation and interpretation of general purpose financial statements.

Credits: 3

Lecture: 3

Lab: 0

ACC 132 - Principles of Accounting II

Description: Advanced U.S. GAAP rules and procedures of accrual accounting applied to the preparation and interpretation of general-purpose financial statements with an introduction to managerial accounting and decision-making.

Prerequisites: ACC 131

Credits: 3

Lecture: 3

Lab: 0

ACC 160 - Computer Accounting with QuickBooks

Description: Use of QuickBooks for general ledger bookkeeping and personal finance. Emphasis on solving advanced accounting simulations.

Prerequisites: ACC 121 or ACC 131

Credits: 3

Lecture: 3

Lab: 0

ACC 162 - Microsoft Excel and Access in Accounting Applications

Description: Use of the spreadsheet software Microsoft Excel and the database software Microsoft Access in the analysis of financial data and generating accounting reports.

Prerequisites: CSA 126 (or CSA 138 and CSA 139) AND ACC 121 or ACC 131

Recommended preparation: ACC 131 and ACC 132

Credits: 3

Lecture: 3

Lab: 0

ACC 210 - Data Analytics for Accounting

Description: The study of data analytics and its applications in accounting and tax contexts, with an emphasis on data preparation, modeling, analysis and interpretation, and visualization.

Prerequisites: CSA 126 (or AGS 101) and ACC 131

Credits: 3

Lecture: 3

Lab: 0

ACC 233 - Intermediate Accounting I

Description: Financial accounting topics, including generally accepted accounting principles application, as well as rationale and clarification of the reasons for specific accounting principles. Includes analysis and use of balance sheets, cash and receivables, inventories, and temporary and long-term investments.

Prerequisites: ACC 131

Credits: 3

Lecture: 3

Lab: 0

ACC 234 - Intermediate Accounting II

Description: Integration of advanced accounting theory and practice, including investments, long and short-term liabilities, pension plans, stockholders' equity, and advanced analysis of financial statements.

Prerequisites: ACC 233

Credits: 3

Lecture: 3

Lab: 0

ACC 296 - Internship: Accounting

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours towards degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

ACC 299 - Independent Study Accounting

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

ACC 310 - Accounting Information Systems

Description: Concepts and terminology of accounting information systems and the use of information technology for decision making in accounting and auditing. Major topic areas include Accounting Information Systems (AIS) and the firm, business processes, data analytics and emerging technologies, and managing and evaluating AIS.

Prerequisites: Program admission. ACC 131, ACC 210, BSA 131, BSA 228, ECN 232, and ECN 236

Credits: 3

Lecture: 3

Lab: 0

ACC 320 - Cost Accounting

Description: The theory and practice of cost accounting with emphasis on its use for planning and control. Expands concepts of budgeting, standards, and profitability analysis introduced in ACC 132.

Prerequisites: Program admission. ACC 131, ACC 132, BSA 131, BSA 228, ECN 232, and ECN 236

Recommended Preparation: ACC 234

Credits: 3

Lecture: 3

Lab: 0

ACC 410 - Forensic Accounting and Fraud Examination

Description: Introduction to the world of fraud detection and deterrence, providing a solid foundation in core concepts and methods for both public and private sector environments. Aligned with the National Institute of Justice (NIJ) model curriculum, this course provides coverage of asset misappropriation, corruption, and fraud.

Prerequisites: Program admission. ACC 131, ACC 132, BSA 131, BSA 228, ECN 232, and ECN 236

Recommended preparation: ACC 234 and BSA 237

Credits: 3

Lecture: 3

Lab: 0

ACC 420 - Governmental and Nonprofit Accounting

Description: Concepts and techniques of fund accounting and the financial reporting for governmental and not-for-profit entities

Prerequisites: Program admission. ACC 115, ACC 131, ACC 132, BSA 131, BSA 228, ECN 232, and ECN 236

Recommended Preparation: ACC 117 and ACC 234

Credits: 3
Lecture: 3
Lab: 0

ACC 430 - Auditing and Assurance Services

Description: Auditing and other assurance services, including professional standards and procedures as applied to external and internal assurance engagements, ethics, and legal liability.

Prerequisites: Program admission. ACC 131, ACC 132, BSA 131, BSA 228, ECN 232, and ECN 236

Recommended Preparation: ACC 234

Credits: 3
Lecture: 3
Lab: 0

Air Force Leadership

AFL 101 - Heritage and Values

Description: Survey course designed to introduce students to the United States Air and Space Forces and provides an overview of the basic characteristics, missions, and organization of the Air and Space Forces. Leadership Laboratory is mandatory for Air Force ROTC cadets and complements this course by providing cadets with followership experiences.

Corequisites: AFL 101L

Credits: 1
Lecture: 1
Lab: 0

AFL 101L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander. These courses are graded pass/fail.

Corequisites: AFL 101

Credits: 1
Lecture: 0
Lab: 2

AFL 102 - Heritage and Values

Description: Continuation of AFL 101. Survey course designed to introduce students to the United States Air and Space Forces and provides an overview of the basic characteristics, missions, and organization of the Air and Space Forces. Leadership Laboratory is mandatory for Air Force ROTC cadets and complements this course by providing cadets with followership experiences.

Corequisites: AFL 102L

Credits: 1

Lecture: 1

Lab: 0

AFL 102L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander. These courses are graded pass/fail.

Corequisites: AFL 102

Credits: 1

Lecture: 0

Lab: 2

AFL 201 - Team and Leadership Fundamentals

Description: Provides a fundamental understanding of both leadership and team building. The lessons and course flow are designed to prepare students for field training and leadership positions in the detachment.

Corequisites: AFL 201L

Credits: 1

Lecture: 1

Lab: 0

AFL 201L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student-planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander.

Corequisites: AFL 201

Credits: 1

Lecture: 0

Lab: 2

AFL 202 - Team and Leadership Fundamentals

Description: Continuation of AFL 201. Provides a fundamental understanding of both leadership and team building. The lessons and course flow are designed to prepare students for field training and leadership positions in the detachment.

Corequisites: AFL 202L

Credits: 1
Lecture: 1
Lab: 0

AFL 202L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student-planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander.

Corequisites: AFL 202

Credits: 1
Lecture: 0
Lab: 2

AFL 301 - Leading People and Effective Communication

Description: Utilizes student field training experience to take a more in-depth look at leadership. Special emphasis is placed on enhancing communication skills and why that is important as a leader. Students have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors.

Corequisites: AFL 301L

Credits: 3
Lecture: 3
Lab: 0

AFL 301L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of the prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student-planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander.

Corequisites: AFL 301

Credits: 1
Lecture: 0
Lab: 2

AFL 302 - Leading People and Effective Communication

Description: Continuation of AFL 301. Utilizes student field training experience to take a more in-depth look at leadership. Special emphasis is placed on enhancing communication skills and why that is important as a leader. Students have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors.

Corequisites: AFL 302L

Credits: 3

Lecture: 3

Lab: 0

AFL 302L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student-planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander.

Corequisites: AFL 302

Credits: 1

Lecture: 0

Lab: 2

AFL 401 - National Security & Commissioning Preparation

Description: It is designed for college seniors and gives them the foundation to understand their role as military officers and how they are directly tied to our National Security Strategy. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level.

Corequisites: AFL 401L

Credits: 3

Lecture: 3

Lab: 0

AFL 401L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership development activities designed to meet the needs and expectations of prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student-planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander.

Corequisites: AFL 401

Credits: 1

Lecture: 0

Lab: 2

AFL 402 - National Security & Commissioning Preparation

Description: Continuation of AFL 401. It is designed for college seniors and gives them the foundation to understand their role as military officers and how they are directly tied to our National Security Strategy. It is an overview of the

complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level.

Corequisites: AFL 402L

Credits: 3

Lecture: 3

Lab: 0

AFL 402L - Leadership Laboratory

Description: LLAB is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Department of the Air Force second lieutenants and complement the AFROTC academic program. It is a student-planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and Operations Flight Commander.

Corequisites: AFL 402

Credits: 1

Lecture: 0

Lab: 2

Agriculture Canine

AGC 190 - Canine Behavior and Psychology I

Description: Introduction to canine behavior in human society. Includes positive reinforcement training techniques, methods of affecting positive outcomes and compatible lifestyles between humans and canines, and an introduction to puppy development, dog breeds and canine body and behavioral language.

Credits: 3

Lecture: 3

Lab: 0

AGC 192 - Canine Behavior and Psychology II

Description: Psychology and behavior of canines along with training and observation skills applying positive reinforcement based concepts. Includes types and causes of aggression, complex behavior problems and dealing with fearful or stressed dogs. Emphasis on in-depth observation of canine body postures, communication with humans and human to canine communication.

Prerequisites: AGC 190

Credits: 3

Lecture: 3

Lab: 0

AGC 193 - Introduction to Canine Health Care

Description: Introduction to health needs of canines both physiologically and anatomically. Includes general first aid and CPR techniques, traditional and alternative disease management methods, grooming and hygiene essentials for dogs, and breeding practices including spay and neuter theories.

Credits: 3

Lecture: 3

Lab: 0

AGC 194 - Canine Business

Description: Communication skills with employees, and the general public related to canine activities to include: rescue groups, breeding, boarding, office or facility environments, and public events.

Credits: 3

Lecture: 3

Lab: 0

AGC 195 - Canine Public Skills

Description: Rules, ethics, laws, and training for dogs and handlers to test for therapy or service dog teams. Student/dog team training in a variety of public environments such as health facilities and businesses.

Prerequisites: AGC 192 (may be taken concurrently)

Credits: 2

Lecture: 1

Lab: 2

AGC 197 - Introduction to Service Dogs

Description: Review of laws regarding Assistance, Service, Emotional Support and Therapy Dogs including American with Disabilities Act (ADA) laws vs. ethics. Includes misuse and abuse by the public of Service Dog teams and public resistance and abuse of Assistance and Service Dogs in public access. Overview of training requirements of Assistance, Service, Emotional Support and Therapy Dogs, and organizations that train Assistance and Service Dogs.

Credits: 2

Lecture: 2

Lab: 0

AGC 215 - Service Dog Public Access and Task Training I

Description: Advances the Service Dog Team toward precise training responses and proper etiquette presentations for public access specifically for exposure to department stores, grocery stores, doctor visits, restaurants, and hair facilities. Introduces critical tasks that Service Dogs must fulfill for service of specific disabilities. Primary tasks for Service Dog. Teams are presented new training and exposure skills and proper communication with the public.

Prerequisites: AGC 190, AGC 192, and AGC 195

Credits: 4

Lecture: 2

Lab: 4

AGC 225 - Service Dog Public Access & Task Training II

Description: Reinforces previous public access skills and tasks with precise training responses and proper etiquette presentations for public access specifically for exposure to public transportation, airplane travel, theaters, malls, casinos, professional care facilities, hospitals and extremely noisy and high activity public places. Teams learn new training skills and proper communication with the public. Introduces critical tasks that Service Dogs must fulfill for service of specific disabilities including task performance in public. Choosing and placing a Service Dog.

Prerequisites: AGC 215

Credits: 4

Lecture: 2

Lab: 4

Agriculture Equine

AGE 101 - Riding Methods I

Description: Basics in pre-ride preparation, tacking, mounting, controlling and directing a horse at the walk and trot. Emphasis on safety, fundamental patterns, and smooth transitions. Includes exercises to develop focus, feel and balance to create fluid synchronization between horse and rider. Horse ownership required or contact instructor for lease option.

Credits: 2

Lecture: 1

Lab: 2

AGE 120 - Equine Health and First Aid

Description: Equine health management with emphasis on identifying potential problems at an early stage, causes and prevention. Includes terminology to better communicate with health care practitioners and horse handling during routine health maintenance, first aid, and emergencies.

Credits: 2

Lecture: 2

Lab: 1

AGE 122 - Principles of Equine Nutrition

Description: Principles of horse nutrition and its application to horse health. Includes the equine digestive system, functions of feeds, nutrient needs, protein, minerals, vitamins, water-soluble vitamins and rations. Emphasis on identifying potential problems at an early stage, causes and prevention.

Credits: 2

Lecture: 2

Lab: 0

AGE 125 - Equine Behavior

Description: Horse behavior as it relates to their care, healthy development, and overall welfare and needs. Perception, learning, communication, and stress are reviewed with a focus on the impact humans have on horses in management, sport, and industry. Basic behavior modification as well as ethical and effective training and handling principles within the context of behavior.

Credits: 3

Lecture: 3

Lab: 0

AGE 140 - Equine Hoof Care

Description: Basic anatomy and physiology of the legs and feet. Equine conformation, movement and performance. Basic horseshoeing trimming techniques.

Credits: 3

Lecture: 3

Lab: 0

AGE 201 - Riding Methods II

Description: Advanced riding skills for any discipline. Emphasis on safety, tack, grooming, horsemanship, and applicable gaits for various breeds. Focus on balance, control, posting, transitions, lateral work, training patterns and basic trail obstacles. Trailering and trail etiquette. Horse ownership required or lease option available; contact instructor.

Credits: 2

Lecture: 1

Lab: 2

AGE 231 - Professional Groom and Handler

Description: Basic skills of handling horses in a safe manner to complete daily job duties in a working stable or show barn. Stall cleaning/maintenance, daily feeding/rations, inventory, purchasing, record keeping, ethics, and client relations. Grooming techniques and equipment. Responsibilities of a professional groom/handler.

Credits: 3

Lecture: 2

Lab: 2

AGE 260 - Ground Skills and Training Techniques in Horsemanship

Description: Ground skills necessary for safety, control and cooperation with horses. Various training philosophies as well as methodologies involved in preparing individuals to train their own horse. Includes hands-on sessions with horses to build ground manners for liberty and riding. Personal horses welcome but not required.

Credits: 3

Lecture: 2

Lab: 2

AGE 296 - Internship: Equine

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Credits: 3

Lecture: Varies

Lab: Varies

AGE 299 - Independent Study Agriculture Science Equine

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Agricultural Science

AGS 100 - Introductory Equine Science

Description: Introduction to horses as they relate to humans including history and development, adaptation, basic anatomy, types and classes, breeds, and horsemanship.

Credits: 4

Lecture: 4

Lab: 0

AGS 101 - Microcomputers in Agriculture

Description: Use of Microsoft Word, Excel, and PowerPoint for documentation, accounting and presentations in the agriculture industry.

Credits: 3

Lecture: 2

Lab: 3

AGS 102 - Agribusiness Management

Description: Introduction to the latest functions of agribusiness including history, starting and running a business, small business plans, input and output sectors, daily financial operations, and basic economic principles. Emphasizes principles of agricultural economics, and economic activity and analysis.

Credits: 3

Lecture: 3

Lab: 0

AGS 103 - Plant Biology

Description: An introduction to the growth, development, reproduction, and structure of vascular plants. Fundamental activities of plants including photosynthesis and respiration. Emphasis on agricultural and horticultural crops of Arizona. This course is cross-listed with BIO 103.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

AGS 105 - Soils

Description: Comprehensive overview of the types of soils commonly found in North America with special emphasis on Southwestern soils. Course investigates the origin, formation, physical and chemical properties of soils and emphasizes soil testing, fertilization, and modifications to soils commonly found in landscapes, gardens and turf.

Credits: 3

Lecture: 3

Lab: 0

AGS 107 - Entomology

Description: Fundamental approaches in the control of greenhouse pests. Categories of pests, management practices, herbicide use, alternative pest control techniques, safety, and integrated pest management.

Credits: 3

Lecture: 3

Lab: 0

AGS 120 - Introduction to the Animal Industry

Description: Classification of agricultural animals, the reproductive process, behavior, basic genetics, growth and development, basic nutrition, welfare and consumer concerns. Emphasis on beef, sheep, swine, poultry, horses, fish and alternative agricultural animals.

Credits: 4

Lecture: 3

Lab: 3

AGS 156 - Organic Home Gardening

Description: Introduction to organic gardening in Yavapai County. Includes basic plant selection, soils, nutrients, and practices consistent with organic production for the home and small hobby farm.

Credits: 1
Lecture: 1
Lab: 0

AGS 157 - Community Supported Agriculture

Description: Production methods for scheduling crops for available space, seasonality, and customer need. Creation and implementation of plans for distribution and marketing sustainable, organic, and pesticide-free agriculture products.

Credits: 3
Lecture: 2
Lab: 3

AGS 202 - Summer Horticulture

Description: Implementation and maintenance of environmentally responsible crops in the food producing industry. Emphasis on market scheduling, soil preparation, hydroponics, sowing and irrigation techniques. Students develop and implement the crop production schedule.

Credits: 2
Lecture: 1
Lab: 2

AGS 215 - Agricultural Mechanics

Description: Principles and operative skills in agriscience technology, including troubleshooting, maintenance, and repair of common agriculture tools and equipment. Emphasis on mig welding, electricity, concrete and mortar, pumps, engines and motors, and basic construction practicing OSHA safety standards.

Credits: 3
Lecture: 1.5
Lab: 4.5

AGS 250 - Horticulture Fall Production

Description: Horticulture production activities involved with the growing of market crops. Emphasis on hydroponic, greenhouse and field grown orchard and row crops. Includes team work and hands on learning managing and producing in an extensive greenhouse, orchard, organic and research gardens and flower beds. State of the art computer controls system and cutting edge techniques used in the cultivation of food crops and ornamentals. Requires additional flexible lab hours.

Credits: 4
Lecture: 2
Lab: 6

AGS 252 - Horticulture Spring Production

Description: Horticulture production principles and activities involved in the growing of market crops in an extensive greenhouse and outdoor production areas. Special emphasis on final stage of production and care of production producing plants, and maintaining inventory for YC Agritopia Plant Sale. Includes management of the facility through hands on learning. Requires additional flexible lab hours.

Credits: 4

Lecture: 2

Lab: 6

AGS 255 - Micro Propagation of Plant Tissue

Description: Plant tissue culture techniques for cloning plants in aseptic conditions.

Credits: 2

Lecture: 1

Lab: 3

AGS 261 - Aquaculture Science

Description: Introduction to the aquaculture and fisheries industry and the related career opportunities. Basic fish culturing environments and species identification of fresh and saltwater fish. Fish biology, diseases, prevention and treatments. Includes fish feeds and feeding techniques.

Credits: 4

Lecture: 3

Lab: 3

AGS 264 - Aquaculture Management

Description: Methodologies used in managing aquaculture systems. Including breeding and rearing procedures of common fin fish, saltwater fish and crustaceans. Field experience in maintaining a rearing facility and producing a food fish from incubation to stocker or market size.

Credits: 4

Lecture: 3

Lab: 3

AGS 274 - Water Management

Description: Irrigation techniques for golf courses, greenhouses, aquaculture, and horse production including sizing pipes and fittings, backflow prevention, filtration, pumps, sprinklers, spraybooms, misters, and valves. Includes code requirements, blueprint reading, and bidding.

Credits: 3

Lecture: 2

Lab: 3

AGS 280 - Zoo and Domestic Animal Care

Description: Introduction to zoo and domestic animal care. Includes safety issues, zoo orientation, animal observation skills, sanitation, housing, feeding, capture and restraint equipment, animal transport, animal measurements, abnormal behavior and injuries.

Credits: 4

Lecture: 3

Lab: 3

AGS 282 - Zoo and Domestic Animal Behavior

Description: Assessment of animal behavior in a variety of species including domestic and exotic animals. Includes internal and external factors influencing animal behavior, social organization, genetics, communication, conflict, mating systems, and biological rhythms.

Credits: 4

Lecture: 3

Lab: 3

AGS 296 - Internship: Agriculture

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

AGS 299 - Independent Study Agriculture

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Allied Health Services

AHS 100 - Fundamentals of Health Care

Description: Overview of current U.S. health care delivery systems and professions including behaviors for success, customer service, and quality improvement.

Prerequisites: Reading Proficiency

Credits: 3
Lecture: 3
Lab: 0

AHS 105 - Phlebotomy

Description: Theory and practice of basic phlebotomy and specimen processing including laboratory tests, equipment, procedures, ethics, safety, legal issues and quality assurance.

Prerequisites: Reading Proficiency

Credits: 2
Lecture: 1
Lab: 3

AHS 114 - Nursing Assistant

Description: Provides the necessary classroom preparation to learn the role of a nursing assistant. Basic nursing assistant skills and emergency procedures; patient or resident needs and rights; written and verbal communication; ethical and legal aspects; safety and infection control.

Prerequisites: Reading Proficiency. MAT 082 or higher (or a satisfactory score on the mathematics skills assessment).

Corequisites: AHS 114L and AHS 114C

Credits: 4
Lecture: 4
Lab: 0

AHS 114C - Nursing Assistant Clinical

Description: Provides the necessary clinical time to develop competency in the role of a nursing assistant through the participation in the care of patients or residents. Basic nursing assistant skills and emergency procedures; patient or resident needs and rights; written and verbal communication; ethical and legal aspects; safety and infection control. All clinical hours are performed in external health care facilities. S/U grading only.

Prerequisites: Reading Proficiency. MAT 082 or higher (or a satisfactory score on the mathematics skills assessment).

Corequisites: AHS 114 and AHS 114L

Credits: 1.5
Lecture: 0
Lab: 3

AHS 114L - Nursing Assistant Skills Lab

Description: Provides the necessary skills lab time to develop competency in the role of a nursing assistant through participation in skills practice in a classroom lab setting. Basic nursing assistant skills and emergency procedures; patient

or resident needs and rights; written and verbal communication; ethical and legal aspects; safety and infection control. S/U grading only.

Prerequisites: Reading Proficiency. MAT 082 or higher (or a satisfactory score on the mathematics skills assessment).

Corequisites: AHS 114 and AHS 114C

Credits: .5

Lecture: 0

Lab: 1.5

AHS 120 - Medical Assistant Administrative Skills

Description: Introduction to the role of the Medical Assistant. Preparation for work in a medical office including legal aspects, communication, customer service and records management.

Prerequisites: AHS 130 and BIO 160. Ready Proficiency.

Credits: 3

Lecture: 2

Lab: 3

AHS 121 - Medical Assistant Clinical Skills

Description: Medical Assistant clinical skills including assisting in patient examinations, diagnostic and surgical procedures, medication administration, and immunizations.

Prerequisites: AHS 120 (may be taken concurrently), AHS 105 and AHS 240. Reading Proficiency.

Credits: 4

Lecture: 3

Lab: 3

AHS 130 - Medical Terminology for Patient Care Staff

Description: Medical terminology used in direct patient care, with special care populations and in special services. Building and analyzing terms using word parts. Body-systems approach to terms related to structure and function, pathologies, and diagnostic procedures. Spelling and pronunciation of terms, medical abbreviations and symbols.

Prerequisites: Reading Proficiency

Credits: 3

Lecture: 3

Lab: 0

AHS 134 - Introduction to Health Information Management

Description: Introduction to the history, evolution and functions performed in the Health Information Management profession. Emphasis on health record content and use within and outside the Health Information Management (HIM) Department.

Prerequisites: Reading Proficiency.

Credits: 3

Lecture: 3

Lab: 0

AHS 140 - Pharmacology for Allied Health

Description: Relationships among anatomy and physiology, disease states, and drugs affecting the endocrine, nervous, respiratory, visual, auditory, integumentary, gastrointestinal, urinary, cardiovascular, and reproductive systems. Overview of psychotropic agents, anti-infectives, analgesics, anti-inflammatories, federal drug laws, drug names and references, vitamins/minerals/herbs, and oncology agents.

Prerequisites: AHS 130 and BIO 160. Reading Proficiency.

Credits: 3

Lecture: 3

Lab: 0

AHS 173 - Legal and Ethical Issues in Healthcare

Description: Application of general principles of law and ethics as related to health information management and patient record management in an electronic, hybrid or paper environment. Legal and ethical issues, legal terminology, records law, patient rights, privacy and security and regulations.

Prerequisites: Reading Proficiency

Credits: 2

Lecture: 2

Lab: 0

AHS 240 - Human Disease Process

Description: Examination of the most common diseases of each body system, with normal anatomy and physiology compared to pathologic anatomy and physiologic malfunctioning due to disease process. Diagnostic methods, etiology, management, treatment, modalities, pharmacology and prognosis are discussed.

Prerequisites: BIO 160. Reading Proficiency.

Credits: 4

Lecture: 4

Lab: 0

AHS 295 - AHS Practicum: Medical Assistant

Description: Entry-level Medical Assistant skills at a supervised host site. Application of cognitive, psychomotor, and affective skills necessary for performing administrative and technical functions in ambulatory healthcare settings including physician's offices, clinics, and urgent care settings. Minimum of 120 practicum hours required. S/U grading only.

Prerequisites: AHS 121, AHS 140, AHS 173, and practicum application. Students must enroll in AHS 295 within 3 semesters of completing AHS 121 and receive program director permission prior to enrollment.

Credits: 3

Lab: 9

AHS 296 - Internship: Allied Health Services

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

AHS 299 - Independent Study Allied Health Services

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Automated Industrial Technology

AIT 105 - Modern Maintenance Operations

Description: Basic skills needed to work in industrial repair and maintenance shops, emphasizing safe and efficient use of tools, tool maintenance and maintenance documentation.

Credits: 3

Lecture: 2

Lab: 3

AIT 110 - Mechanical Power Transmission Systems

Description: Preventative maintenance, calibration, alignment, and troubleshooting of machinery components and mechanical power transmission systems.

Credits: 3

Lecture: 2

Lab: 3

AIT 115 - Hydraulic Systems

Description: Introductory course in the principles of hydraulic system operation, component construction, maintenance, troubleshooting, and operation.

Credits: 3

Lecture: 2

Lab: 3

AIT 120 - Pneumatic Systems

Description: Introductory course in the principles of pneumatic system operation, component construction, maintenance, troubleshooting, and operation.

Credits: 3

Lecture: 2

Lab: 3

AIT 225 - Basic Industrial Motor Control

Description: An introductory course in DC, single-phase AC, and 3-phase AC electric motors and motor control circuits. Includes motor control circuit components, motor control circuit applications, sequencing circuits, and timing circuits.

Prerequisites: ELT 101 and ELT 102.

Credits: 3

Lecture: 2

Lab: 3

AIT 299 - Independent Study Automated Industrial Technology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Administration of Justice

AJS 101 - Introduction to Administration of Justice

Description: Overview of the criminal justice system. Organization and jurisdiction of local, state, and federal law enforcement, judicial, and correctional systems. History and philosophy of each component of the criminal justice system and interrelations among the various agencies. Career opportunities and qualifying requirements.

Credits: 3

Lecture: 3

Lab: 0

AJS 103 - Public Safety Report Writing

Description: Introduction to effective report writing in a variety of public safety incident settings, including law enforcement, fire safety and emergency medical situations. Emphasis on clear and concise writing as well as the legal ramifications of public safety reports.

Credits: 3

Lecture: 3

Lab: 0

AJS 106 - Public Safety Communications

Description: Introduction to necessary skills and knowledge for public safety communications.

Prerequisites: Reading Proficiency.

Credits: 3

Lecture: 3

Lab: 0

AJS 109 - Substantive Criminal Law

Description: Nature, origins, purposes, structure and operation of the American criminal justice system. Constitutional limitations. Classification and basic elements of crimes. Common defenses to crimes. Syllabus Available. This course is cross-listed with LAW 109.

Credits: 3

Lecture: 3

Lab: 0

AJS 123 - Ethics and Criminal Justice

Description: Ethical issues, cultural influences and moral theories as they relate to the justice system. Focus on underlying values and ethical challenges faced by law enforcement, attorneys, the judiciary and correctional staff. Specific ethical scenarios common to the criminal justice system will be addressed. Emphasis on critical thinking and value decision making.

Prerequisites: Reading Proficiency

General Education Competency: Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

AJS 170 - Forensic Science

Description: Characteristics and elements of forensic science and the processes of collecting, preserving and analyzing different types of physical evidence. Includes organization of a crime laboratory, crime scene processing and legal aspects.

Credits: 3

Lecture: 3

Lab: 0

AJS 192 - Serial Killers and Mass Murderers

Description: Motives, methods and states of mind of both serial killers and mass murderers. Includes profiling of these killers and their victims, as well as theories of causation.

Credits: 3

Lecture: 3

Lab: 0

AJS 200 - Current Issues in Criminal Justice

Description: Current issues, trends, and techniques related to and affecting the criminal justice system.

Credits: 3

Lecture: 3

Lab: 0

AJS 212 - Juvenile Justice Procedures

Description: History and development of juvenile justice theories, procedures and institutions. This course is cross-listed with LAW 212.

Credits: 3

Lecture: 3

Lab: 0

AJS 225 - Criminology

Description: Theories of criminality and the economic, social and psychological impact of crime, victimization, and the relationships between statistics and crime trends. The study of deviance and society's role in defining behavior.

Credits: 3

Lecture: 3

Lab: 0

AJS 226 - Victimology and Crisis Intervention

Description: The study of victims of crime, including reasons that some individuals are victimized and the legal protections afforded to victims. Includes crisis interventions by the criminal justice system to assist victims and their families.

Credits: 3
Lecture: 3
Lab: 0

AJS 227 - Victim Advocacy

Description: The study of victim advocacy as a career choice, with the duties, educational background, types of advocacy, and varied locations of service. Develop self-care management while serving others experiencing trauma from victimization. This course requires 30 face-to-face observation hours in a victim advocacy setting.

Prerequisites: AJS 101 (may be taken concurrently)

Credits: 4
Lecture: 3
Lab: 2

AJS 228 - Gender-Related Violence

Description: The study of the violent crimes of sexual assault and intimate partner violence and the unique aspects of traumatic behavior, evidence identification and collection, appropriate interviewing techniques, and differences in suspect's relationship to the victim.

Credits: 3
Lecture: 3
Lab: 0

AJS 230 - The Police Function

Description: History and development, procedures and methods of operations of law enforcement agencies. Role of the individual law enforcement officer. Career opportunities and the hiring process.

Credits: 3
Lecture: 3
Lab: 0

AJS 240 - The Correction Function

Description: History and development of correctional theories, practices, and institutions. Modern ideologies and functions associated with both communitybased and custodial corrections systems.

Credits: 3
Lecture: 3
Lab: 0

AJS 252 - Homeland Security and Terrorism

Description: Introduction to Homeland Security and homeland defense policies and strategies, with a focus on terrorism, immigration, and border security.

Credits: 3
Lecture: 3
Lab: 0

AJS 260 - Procedural Criminal Law

Description: Procedural criminal law. Emphasis on rationale underlying major court holdings, the resulting procedural requirements, and the effect on the daily operations of the criminal justice system. This course is cross-listed with LAW 260.

Credits: 3
Lecture: 3
Lab: 0

AJS 270 - Community Relations

Description: Recognition and understanding of community problems; community action programs; methods of coping with crisis situations, victimology, ethnic and minority cultures, environments, crime prevention and police operations.

Credits: 3
Lecture: 3
Lab: 0

AJS 275 - Criminal Investigations

Description: Theories of criminal investigation. Includes basic investigative techniques of crime scene procedures, case preparation, and interview techniques.

Credits: 3
Lecture: 3
Lab: 0

AJS 278 - Neuroscience and the Law

Description: A multi-disciplinary look at how new discoveries in neuroscience and our understanding of the brain are having a direct impact on the criminal justice system.

Credits: 3
Lecture: 3
Lab: 0

AJS 290 - Constitutional Law: Civil Liberties and Civil Rights

Description: Introduction to the United States and Arizona Constitutions from the integrated social science perspectives of history, geography, and government. The United States Constitution, including the Bill of Rights and the Fourteenth Amendment. Includes the impact of U. S. Supreme Court opinions and Arizona Supreme Court opinions on the history and development of civil liberties and civil rights, particularly as they pertain to the administration of justice and law enforcement. This course is cross-listed with LAW 290.

Credits: 3
Lecture: 3
Lab: 0

AJS 292 - Intensive Police Certification

Description: Study of the roles, responsibilities, and procedures of law enforcement officers. This course contains the Arizona Peace Officers Standards and Training curriculum required for peace officer certification.

Prerequisites: Student must be appointed by an Arizona law enforcement agency.

Credits: 34
Lecture: 24
Lab: 30

AJS 296 - Internship: Administration of Justice

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies
Lab: Varies

AJS 298 - Special Justice Topics:

Description: Introduction to a special justice topic with great relevance to the field.

Credits: 3
Lecture: 3
Lab: 0

AJS 299 - Independent Study Administration of Justice

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Anthropology

ANT 101 - Stones, Bones, and Human Origins

Description: Introduction to physical anthropology. Emphasis on population genetics, primate evolution and behavior, and fossil man.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ANT 102 - Introduction to Cultural Anthropology

Description: Survey of anthropological principles with emphasis on concept of culture and nature of man as a social animal.

General Education Competency: Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

ANT 104 - Buried Cities and Lost Tribes

Description: Introduction to the portion of human history that extends back 2.5 million years before the time of written records and archives. Emphasis on study of the world prehistory of humankind from a global perspective.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

ANT 214 - Magic, Witchcraft and Healing: The Supernatural in Cross-Cultural Perspective

Description: Origins, elements, and forms of religion; a comparative survey of religious beliefs, myths, rituals and symbolism including magic, witchcraft and healing as practiced in selected regions of the world; the place of religion in the total culture.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

ANT 230 - Principles of Archeology

Description: Introduction to methods, theory, and techniques used in archaeology. The scope of human prehistory from the earliest human cultures to the rise of complex civilizations.

Prerequisites: ENG 101 or ENG 103

Credits: 3
Lecture: 3
Lab: 0

ANT 231 - Southwestern Archeology

Description: Survey of man's prehistory in the southwestern United States beginning with the earliest evidence of man in the Southwest and concluding with the period just before Spanish contact.

General Education Competency: Written Communication

Credits: 3
Lecture: 3
Lab: 0

ANT 232 - Indians of the Southwest

Description: Survey of major Indian groups of the southwestern United States: Pueblo, Navajo, Apache, Papago, Pima, River Yuman and Mountain Yuman (Yavapai, Hualapai, Havasupai). Emphasis on historical factors that have led to culture change. Development of these groups from Spanish contact to present.

General Education Competency: Diversity

Credits: 3
Lecture: 3
Lab: 0

ANT 296 - Internship: Anthropology

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies
Lab: Varies

ANT 299 - Independent Study Anthropology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Art

ART 100 - Art Appreciation

Description: Explores creativity as a fundamental human characteristic with diverse expressions across culture, geography, and time. Visual literacy and critical analysis skills will be developed to understand how global artistic and material culture reflects the intersection of historical and contemporary concepts with social issues and identities. The appreciation of art in this way will help the student better find their place in the world - as an individual and as a member of wider communities.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

ART 110 - Drawing I

Description: Perspective and visual perception studied as related to developing artistic visual growth in perceiving our environment. Emphasis on analysis of objects and their compositional placement within pictorial construction. Application of design principles.

Credits: 3

Lecture: 1

Lab: 5

ART 111 - Drawing II

Description: Development of technical and perceptual skills. Emphasis on composition as developed by shape, form, color and the special dynamics of plastic space. Application of design principles.

Prerequisites: ART 110

Credits: 3

Lecture: 1

Lab: 5

ART 112 - Two-Dimensional Design

Description: Introduction to visual language utilized in all areas of art. Basic compositional principles and elements of two-dimensional design practiced through assigned projects. Various media explored. Application of design principles.

Prerequisites: Reading Proficiency

General Education Competency: Critical Thinking

Credits: 3

Lecture: 2

Lab: 4

ART 113 - Three-Dimensional Design

Description: Study of design principles with emphasis on three-dimensional aesthetics. Planning of sculptural, utilitarian, and environmental objects. Application of design principles.

Prerequisites: Reading Proficiency

General Education Competency: Critical Thinking

Credits: 3

Lecture: 2

Lab: 4

ART 114 - Color

Description: Principles of color theory related to the visual arts. Includes variety of media. Application of design principles.

Credits: 3

Lecture: 1

Lab: 5

ART 117 - Four-Dimensional Design

Description: Introduction to the breadth of New Media art practices. This includes discussing duration, tempo, intensity, scope, setting, and chronology as the six major elements of time design.

Credits: 3

Lecture: 2

Lab: 4

ART 120 - Ceramics I

Description: Introduction to ceramics hand building techniques. Includes primary use of glazes, glaze applications, kiln firing processes and kiln atmosphere. Application of design principles.

Credits: 3

Lecture: 1

Lab: 5

ART 121 - Ceramics II

Description: Concentration on use of the potter's wheel and other clay-building methods, further development of glazing and firing. Application of design principles.

Prerequisites: ART 120

Credits: 3

Lecture: 1

Lab: 5

ART 129 - Digital Drawing and Painting

Description: Translate traditional drawing and painting techniques using digital tools on the computer with pressure-sensitive electronic pen tablets, stylus, and software to create digital art that implements various traditional mediums. Concept and personal style development will be emphasized.

Prerequisites: ART 110 or ART 112

Credits: 3

Lecture: 1

Lab: 5

ART 130 - Web Design

Description: Introduction to design and production of web pages for publishing on the internet using industry standard software. Application of design principles.

Credits: 3

Lecture: 2

Lab: 3

ART 131 - Graphic Design I

Description: Creative solutions to problems of visual communication. Skill development in basic advertising layout and design. Basic typography and comprehensive roughs using Adobe Creative Suite Software. Application of design principles.

Prerequisites: ART 112 (may be taken concurrently)

Credits: 4

Lecture: 1

Lab: 7

ART 132 - Graphic Design II

Description: Creative solutions to advanced problems of visual communication. Skill development in advertising, logos, advanced layout and packaging using Adobe Creative Suite software. Application of design principles.

Prerequisites: ART 131 and ART 137

Credits: 4

Lecture: 1

Lab: 7

ART 137 - Adobe Photoshop I

Description: Digital image fundamentals. Technical and creative use of Adobe® Photoshop® image manipulation software. Use of peripheral commercial hardware and software for image capture. Application of design principles.

Credits: 3
Lecture: 2
Lab: 3

ART 139 - Fundamentals of Video Editing

Description: Basic techniques of capturing, editing, and distributing video content. Hands-on application of techniques for digital video; editing vocabulary; and sharing digital video. This course is cross-listed with FMA 139.

Credits: 3
Lecture: 2
Lab: 3

ART 140 - Jewelry I

Description: Introduction to jewelry fabrication techniques for non-ferrous metals and associated materials. Application of design principles.

Credits: 3
Lecture: 1
Lab: 5

ART 141 - Jewelry II

Description: Advanced jewelry techniques, surface embellishment, casting, fabrication, forging, and joining non-ferrous metals. Application of design principles.

Prerequisites: ART 140

Credits: 3
Lecture: 1
Lab: 5

ART 142 - Lapidary I

Description: Introduction to the tools, machinery and processes of the lapidary arts. Orientation to various geological source materials. Application of design principles.

Credits: 2
Lecture: 1
Lab: 2

ART 144 - Furniture and Woodworking I

Description: Introduction to furniture design, joinery, machining, hand skills, assembly and finishing techniques. Application of design principles.

Credits: 3

Lecture: 1

Lab: 5

ART 145 - Furniture and Woodworking II

Description: Advanced furniture design, joinery, jig building, and woodworking techniques. Application of design principles.

Prerequisites: ART 144

Credits: 3

Lecture: 1

Lab: 5

ART 147 - Wood Turning I

Description: Study of theory and design of wood lathe-turned objects. Includes wood-turning techniques, use of wood lathe and associated tooling. Application of design principles.

Credits: 3

Lecture: 1

Lab: 5

ART 154 - Digital Photography I

Description: Creative digital camera operation. Identifying, measuring and controlling light values. Digital darkroom techniques, workflow applications and output processes. Application of design principles. Requires a Digital single lens reflex (SLR) camera with manually adjustable aperture, shutter speed, and focus.

Prerequisites: ART 137

Credits: 3

Lecture: 1

Lab: 5

ART 160 - Printmaking I

Description: Introduction to printmaking techniques including monoprint, collograph, relief and elementary intaglio printing. Exploration of different methods of inking, registration, hand and press techniques. Application of design principles.

Credits: 3

Lecture: 1

Lab: 5

ART 180 - Sculpture I

Description: Introductory exploration of sculpture through fabrication, casting and carving for creative problem solving. Emphasis on sculpture history and modes of criticism. Application of design principles.

Credits: 3
Lecture: 1
Lab: 5

ART 181 - Sculpture II

Description: Continued Study of Sculpture process through carving, fabrication and casting, to develop personal approaches to dimensional composition. Emphasis on sculpture history and modes of criticism.

Prerequisites: ART 180

Credits: 3
Lecture: 1
Lab: 5

ART 182 - Welded Metal Sculpture I

Description: Exploration of sculpture using Oxyacetylene torches. Emphasis on welding, cutting, and shaping metal to explore sculptural forms. No prior welding experience is necessary. Application of design principles.

Credits: 3
Lecture: 1
Lab: 5

ART 183 - Welded Metal Sculpture II

Description: Exploration of sculpture using Oxyacetylene torches and GMAW (wire) arc welding processes. Assignments expand personal imagery in metal sculpture. Application of design principles.

Prerequisites: ART 182

Credits: 3
Lecture: 1
Lab: 5

ART 190 - Oil/Acrylic Painting I

Description: Study and experimentation in painting techniques employed by modern and old masters. Emphasis on personal creativity and uniqueness of expression. Application of design principles.

Prerequisites: ART 110

Credits: 3
Lecture: 1
Lab: 5

ART 191 - Oil/Acrylic Painting II

Description: Development of personal expression through study of different techniques of painting. Application of design principles.

Prerequisites: ART 190

Credits: 3
Lecture: 1
Lab: 5

ART 194 - Watercolor I

Description: Exploration of transparent qualities of watercolor medium. Techniques and materials used to stimulate personal creativity and uniqueness of expression. Application of design principles.

Prerequisites: ART 110

Credits: 3
Lecture: 1
Lab: 5

ART 195 - Watercolor II

Description: Independent development using the watercolor medium. Study of varied techniques will be utilized to meet individual needs. Application of design principles.

Prerequisites: ART 194

Credits: 3
Lecture: 1
Lab: 5

ART 196 - Portraiture I

Description: Emphasis on portraiture techniques for individuals proficient in a specific medium. Application of design principles.

Prerequisites: ART 110 and ART 190

Credits: 3
Lecture: 1
Lab: 5

ART 197 - Portraiture II

Description: Advanced study of portraiture personalizing techniques and palettes. Emphasis on capturing the subject's personality. Application of design principles.

Prerequisites: ART 196

Credits: 3
Lecture: 1
Lab: 5

ART 198 - Art Topics

Description: Exploration of art media.

Credits: 1
Lecture: 1
Lab: 0

ART 200 - Art History: Paleolithic Period through the Late Middle Ages

Description: Western art from the Paleolithic Period to the Fourteenth Century. Two and three-dimensional art and architecture evaluated in historical and cultural context. Application of design principles.

Prerequisites: ENG 101 or ENG 101A or ENG 103

General Education Competency: Written Communication; Diversity

Credits: 3
Lecture: 3
Lab: 0

ART 201 - Art History: Pre-Renaissance through the 21st Century

Description: Western art from the Fourteenth to the Twentieth Century. Two- and three-dimensional art and architecture are evaluated in historical and cultural context. Application of design principles.

Prerequisites: ENG 101 or ENG 101A or ENG 103

General Education Competency: Written Communication; Diversity

Credits: 3
Lecture: 3
Lab: 0

ART 210 - Life Drawing I

Description: Developing skills and expressiveness in drawing a basic form, construction and gesture of the human figure. Application of design principles.

Prerequisites: ART 110

Credits: 3
Lecture: 1
Lab: 5

ART 211 - Life Drawing II

Description: Emphasis on drawing forms. Personal growth and individual techniques developed through projects emphasizing various media and techniques in drawing history. Application of design principles.

Prerequisites: ART 210

Credits: 3

Lecture: 1

Lab: 5

ART 212 - Life Painting

Description: Techniques of figure painting with an emphasis on the form, construction and gesture of the figure. Application of design principles.

Prerequisites: ART 110 and ART 190

Credits: 3

Lecture: 1

Lab: 5

ART 222 - Advanced Projects: Ceramics

Description: Advanced study of clay building methods, glazing and firing techniques with emphasis on design and honing personal aesthetic.

Prerequisites: ART 121

Credits: 3

Lecture: 1

Lab: 5

ART 230 - Graphic Design III

Description: Creative solutions to advanced problems of visual communication across multiple modalities. Skill development in identity design, advanced layout, and advanced packaging using a combination of industry-standard design software. Application of design principles.

Prerequisites: ART 132

Credits: 4

Lecture: 1

Lab: 7

ART 231 - Digital Illustration

Description: Contemporary styles in vector graphics and drawing. Skill development in logo and character design and information graphics using industry standard software. Application of design principles.

Prerequisites: ART 110 or ART 112

Credits: 4

Lecture: 1

Lab: 7

ART 232 - Portfolio Development

Description: Develop traditional and electronic graphic design and fine arts portfolios. Create resume and other career search materials. Develop advanced design and technical skills. Exhibition skills. Apply design principles. Completed body of art work needed for class.

Prerequisites: ART 112 and ART 137 or Instructor Permission.

Credits: 2

Lecture: 1

Lab: 3

ART 233 - User Experience Design

Description: Website planning, design, and evaluation using industry-standard software and languages. Basic principles of User Experience (UX) flows and interactions in interactive media. Application of design principles to web authoring.

Prerequisites: ART 130

Credits: 3

Lecture: 2

Lab: 3

ART 234 - Advanced Graphic Design Projects

Description: Advanced design projects using a combination of Adobe Creative Suite programs. Skill development in corporate design, self-promotion, typography, and advanced skills. Application of design principles.

Prerequisites: ART 131 and ART 231

Credits: 3

Lecture: 2

Lab: 4

ART 242 - Lapidary II

Description: Advanced techniques using specialized lapidary tools to create cabochons from rare materials. Application of design principles.

Prerequisites: ART 142

Credits: 2

Lecture: 1

Lab: 2

ART 245 - Advanced Projects in Jewelry

Description: Advanced individual projects in jewelry and metalsmithing. Includes review of processes, tools, and materials. Application of design principles.

Prerequisites: ART 140 and ART 141

Credits: 3

Lecture: 1

Lab: 5

ART 247 - Wood Turning II

Description: Use of the wood lathes for creative expression. Contemporary tools and techniques used on and off the lathes to create artistic woodturnings. Application of design principles.

Prerequisites: ART 147

Credits: 3

Lecture: 1

Lab: 5

ART 248 - Advanced Projects in Wood

Description: Designing, fabricating functional pieces and/or making sculpture to explore the potentials of the medium. Projects are to be a unified series. Application of design principles.

Prerequisites: ART 145

Credits: 3

Lecture: 1

Lab: 5

ART 249 - Advanced Projects in Wood Turning

Description: Emphasis on design and varied techniques to explore the potentials of three-dimensional form. Projects are to be a unified series working toward portfolio development. Application of design principles.

Prerequisites: ART 247

Credits: 3

Lecture: 1

Lab: 5

ART 260 - Printmaking II

Description: Basic techniques of etching, aquatint, and softground processes. Use of engraving, etching tools and roulettes for hand-texturing techniques. Single plate color techniques. Application of design principles.

Prerequisites: ART 160

Credits: 3

Lecture: 1

Lab: 5

ART 261 - Printmaking III

Description: Advanced study of printmaking techniques in areas such as combined plate processes of embossment, collograph, texturing build-up techniques and multiple-plate processes of intaglio and relief printing. Application of design principles.

Prerequisites: ART 260

Credits: 3

Lecture: 1

Lab: 5

ART 281 - Advanced Projects in Sculpture

Description: Design and techniques for additive process, carved and/or mixed media sculpture to explore the potentials of three-dimensional form. Projects are to be a unified series of projects working toward portfolio development. Application of design principles.

Prerequisites: ART 181

Credits: 3

Lecture: 1

Lab: 5

ART 283 - Advanced Projects in Welded Metal Sculpture

Description: Emphasis on design and fabrication of metal sculpture to explore the potentials of the medium. Unified series of projects working toward portfolio development. Application of design principles.

Prerequisites: ART 183

Credits: 3

Lecture: 1

Lab: 5

ART 292 - Advanced Projects in Oil and Acrylic

Description: Advanced projects in oil and acrylic painting. Review of techniques and materials. Application of design principles.

Prerequisites: ART 191

Credits: 3

Lecture: 1

Lab: 5

ART 293 - Advanced Projects in Watercolor

Description: Advanced projects in watercolor painting. Review of techniques and materials. Application of design principles.

Prerequisites: ART 195

Credits: 3

Lecture: 1

Lab: 5

ART 296 - Internship: Art

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

ART 298 - Art Workshop

Description: Exploration and application of media techniques.

Credits: 2

Lecture: 2

Lab: 0

ART 299 - Independent Study Art

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

American Sign Language

ASL 101 - Beginning American Sign Language I

Description: Principles, methods, and techniques of American Sign Language skills, with emphasis on developing visual/receptive skills and basic communication.

Credits: 4
Lecture: 4
Lab: 0

ASL 102 - Beginning American Sign Language II

Description: American Sign Language vocabulary, grammar, receptive, and expressive technique development.

Prerequisites: ASL 101

Credits: 4
Lecture: 4
Lab: 0

ASL 201 - Intermediate American Sign Language I

Description: Proficiency and development of intermediate expressive and receptive skills. Emphasis on practical application of American Sign Language skills and cross-cultural communication.

Prerequisites: ASL 102

Credits: 4
Lecture: 4
Lab: 0

ASL 202 - Intermediate American Sign Language II

Description: Extension of proficiency and development of receptive and expressive skills at the intermediate level. Emphasis on practical application of American sign language skills and cross-cultural communication with a focus on the cultural aspects.

Prerequisites: ASL 201

Credits: 4
Lecture: 4
Lab: 0

ASL 296 - Internship: American Sign Language

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies

Lab: Varies

ASL 299 - Independent Study American Sign Language

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Automotive

AUT 103 - Automotive/Diesel Preventative Maintenance

Description: Fundamentals of truck equipment and automobile basic preventative maintenance procedures.

Credits: 4

Lecture: 2

Lab: 4

AUT 105 - Introduction to Auto Body Repair

Description: Basic fabrication and primer application. Emphasis on nonstructural body repair, filling, sanding, primers, and spraying techniques.

Credits: 4

Lecture: 2

Lab: 4

AUT 106 - Automotive/Motorcycle Custom Painting

Description: Automotive paint finishing using professional techniques and equipment. Includes color selection, mixing, masking, sanding, spraying, powder coating, maintaining a spray booth, and post-paint care.

Credits: 3

Lecture: 1

Lab: 4

AUT 107 - Autographics/Airbrushing

Description: Basic theory and fundamentals of automotive/motorcycle airbrushing.

Credits: 3

Lecture: 1

Lab: 4

AUT 108 - Diesel Engine Repair Technology

Description: Theory, diagnosis and service common to all diesel engines. Includes engine rebuilding and performance testing along with engine mechanical fuel systems and testing. Preparation for the ASE Certification test on Medium/Heavy Truck Diesel Engines and Light Duty Diesel Engines ASE Automotive Certification.

Credits: 4

Lecture: 2

Lab: 4

AUT 109 - Auto/Diesel Electrical Systems

Description: Electrical principles and diagnosis of diesel and automotive electrical systems. Includes repair of batteries, charging systems, starting systems, ignition systems and use of electrical testing instruments.

Credits: 4

Lecture: 2

Lab: 4

AUT 110 - Advanced Airbrushing Techniques

Description: Advanced airbrushing techniques including airbrushing with pearls, metal flakes, candies, transparents, and translucents. Special faux effects including portraits and real fire.

Prerequisites: AUT 107

Credits: 3

Lecture: 1

Lab: 4

AUT 111 - Auto Body Welding and Collision Repair

Description: Removal, replacement, and repair of body panels, door skins, fender patch, rocker panels, floor components, mechanical components, and quarter panels. Includes structural damage repair.

Credits: 3

Lecture: 1

Lab: 4

AUT 115 - Auto Body and Paint Project

Description: Individual project in auto body repair and paint application. Incorporates planning and design, tool and material selection and project completion.

Prerequisites: AUT 105 and AUT 106

Credits: 2

Lecture: 0

Lab: 4

AUT 122 - Automatic Transmissions and Transaxles

Description: Theory, diagnosis and repair of selected GM, Ford and Chrysler automatic transmissions.

Prerequisites: AUT 109

Credits: 4

Lecture: 2

Lab: 4

AUT 123 - Automotive Brakes

Description: General braking principles, terms, definitions, and other functions connected with the automobile braking system. Correct operation and use of brake servicing equipment for drum and disc brakes.

Credits: 4

Lecture: 2

Lab: 4

AUT 124 - Auto/Diesel Manual Drive Trains

Description: Theory, diagnosis, and service of clutches, driveline, synchromesh transmissions, final drives and manual shift transmissions. Preparation for the ASE Certification Test on A3 Manual Drive Trains and T3 Truck Drive Trains.

Credits: 4

Lecture: 2

Lab: 4

AUT 126 - Auto/Diesel Suspension and Steering

Description: Principles of suspension system geometry and steering systems operation. Adjustment, correction, repair and replacement components of system components.

Credits: 4

Lecture: 2

Lab: 4

AUT 128 - Auto/Diesel Heating and Air Conditioning

Description: Theory of heat transfer forms of matter, refrigeration cycle, and operating principles of automotive air conditioning systems. Fundamentals in testing, repairing, disassembling and assembling components of heating and air conditioning systems.

Credits: 4

Lecture: 2

Lab: 4

AUT 135 - Diesel Braking Systems

Description: Theory, diagnosis and repair of diesel air, hydraulic and anti-lock brake systems. Emphasis on tires and wheels, and hydraulic and air brake systems.

Credits: 4

Lecture: 2

Lab: 4

AUT 153 - Auto Engine Repair

Description: Theory of operation of gasoline powered engines. Includes engine servicing and engine removal and replacement procedures.

Credits: 4

Lecture: 2

Lab: 4

AUT 198 - Automotive Topics:

Description: Exploration of specialized automotive topics outside of the standard curriculum.

Prerequisites: AUT 103

Credits: 1-3

Lecture: Varies

Lab: Varies

AUT 208 - Advanced Diesel Engine Repair

Description: Advanced block, crankshaft, bearing, and cylinder head and timing component diagnosis and repair.

Prerequisites: AUT 108

Credits: 4

Lecture: 2

Lab: 4

AUT 225 - Diesel Engine Performance

Description: Principles of operation, diagnosis and repair of engine fuel and computer systems. Use of diagnostic oscilloscope and scan tools to repair malfunctioning fuel and computer systems.

Prerequisites: AUT 109

Credits: 4

Lecture: 2

Lab: 4

AUT 230 - Advanced Light/Medium Duty Diesel Diagnosis 1500-4500 Series

Description: Theory of operation of current model diesel engine systems.

Credits: 4

Lecture: 2

Lab: 4

AUT 231 - Auto Engine Diagnostics

Description: Principles of operation, diagnosis and repair of engine fuel and ignition systems. Use of diagnostic oscilloscope to repair malfunctioning fuel and ignition systems.

Prerequisites: AUT 109

Credits: 5

Lecture: 3

Lab: 4

AUT 275 - Basic Automotive Upholstery

Description: Introduction to automotive and motorcycle upholstery. Includes power sewing machines, tools, and new coverings for bucket, bench and motorcycle seats.

Credits: 3

Lecture: 1

Lab: 4

AUT 276 - Advanced Upholstery

Description: Advanced techniques in automotive and motorcycle upholstery. Includes headliners, carpeting, door panels, and other interior accessories.

Prerequisites: Prerequisite: AUT 275

Credits: 2

Lecture: 1

Lab: 2

AUT 295 - Apprenticeship: Diesel

Description: Supervised field experience with heavy diesel equipment.

Prerequisites: Program Admission

Credits: 3

Lecture: Varies

Lab: Varies

AUT 296 - Internship: Automotive

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

AUT 299 - Independent Study Automotive

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Aviation

AVT 108 - Pre-Aviation Groundschool

Description: Fundamentals of aerodynamics, aircraft operation and performance, weather, and preflight planning.

Credits: 3

Lecture: 3

Lab: 0

AVT 114 - Instrument Pilot Airplane Flight

Description: Flight by reference to instruments. Emphasis on instrument preflight, navigation, approach, emergency, and post-flight procedures. Includes actual flight time in preparation for the FAA instrument pilot airplane oral and practical test under 14 CFR 61.65.

Prerequisites: Program Admission. AVT 129, AVT 115 and AVT 214 (may be taken concurrently).

Credits: 3.5

Lecture: 2

Lab: 4.5

AVT 115 - Instrument Pilot Airplane Ground

Description: Instrument navigation, Instrument Flight Rule (IFR) traffic system procedures, dead reckoning, IFR Radio navigation, use of various instrumentation systems, IFR charts, weather reports and forecasts, transponders, radars, radio aids, anti-icing/deicing systems, preflight checks, aeronautical decision making.

Prerequisites: Program Admission.

Credits: 4
Lecture: 4
Lab: 0

AVT 119 - Pre-Aviation Flight Simulation

Description: Introduction to flying and basic flight operations via simulation. Includes basic flight maneuvers, traffic patterns, departures, approaches, and emergency procedures under simulated flight conditions.

Credits: 2
Lecture: 1
Lab: 3

AVT 122 - Fundamentals of Air Traffic Control

Description: Airport air traffic control history, navigation systems, system structure and control communication procedure and phraseology. Heavy emphasis place on preliminary terminology used in radio communication.

Credits: 3
Lecture: 2
Lab: 2

AVT 123 - Air Traffic Control Tower Procedures

Description: Duties and responsibilities of each position in a typical Federal Aviation Administration (FAA) control tower. Includes Facility Letters of Agreements, Facility Standard Operating Procedures, and the duties and responsibilities of a Tower Controller as outlined in FAA orders.

Prerequisites: AVT 122

Credits: 3
Lecture: 2
Lab: 2

AVT 124 - Fundamentals of Air Traffic Control Radar Operation

Description: Theory and fundamentals of radar operation as it pertains to the National Airspace System, Oceanic and International Air Traffic Control, and the Federal Aviation Administration (FAA).

Prerequisites: AVT 122 and AVT 123

Credits: 3
Lecture: 2
Lab: 2

AVT 129 - Private Pilot Airplane Flight

Description: Flight training including supervised and solo cross-country flights and intermediate operations. Preparation for Federal Aviation Administration private pilot airplane oral and practical exam.

Prerequisites: Program Admission. AVT 108 and AVT 119.

Credits: 3.5

Lecture: 2

Lab: 4.5

AVT 204 - Commercial Pilot Single-Engine Airplane Ground

Description: Designed for students who are both private pilot and instrument flight rated for airplane flight and are seeking the commercial single engine pilot rating. Includes advanced airplane components, advanced aerodynamics and advanced performance.

Prerequisites: AVT 115

Credits: 2

Lecture: 2

Lab: 0

AVT 205 - Commercial Pilot Multi-Engine Airplane Ground

Description: Designed for students who are both private pilot and instrument flight rated for airplane flight and are seeking the commercial single engine pilot rating. Includes advanced airplane components, meteorology, cross country flight, and commercial Federal Aviation Administration (FAA) regulations.

Prerequisites: AVT 204

Credits: 2

Lecture: 2

Lab: 0

AVT 214 - Instrument Pilot Flight Simulation

Description: Introduction to flight by reference to instruments. Emphasis on instrument navigation, approach, and emergency procedures in the simulator. Includes preparation for FAA instrument pilot oral and practical test.

Prerequisites: Program Admission.

Credits: 1

Lab: 3

AVT 215 - Flight Instructor Airplane Ground

Description: Instructional strategies and planning, communications, student evaluation, the learning process and flight instructor responsibilities.

Prerequisites: AVT 205

Credits: 2

Lecture: 2

Lab: 0

AVT 219 - Single Engine Commercial Flight II

Description: Commercial Single Engine Flight II is a continuation of Commercial Engine Flight I and is building upon flight hours needed to meet the required number of hours for commercial licensure under FAA Part 61 rules. Includes advanced airplane components, advanced aerodynamics and advanced performance.

Prerequisites: AVT 217 - Single Engine Commercial Flight I

Credits: 3

Lecture: 2

Lab: 3

AVT 222 - Flight Instructor Airplane Flight

Description: Techniques for giving one-on-one instruction to airplane student pilots and critiquing student performance. Preparation for Federal Aviation Administration (FAA) flight instructor airplane oral and practical examinations.

Prerequisites: AVT 215 (may be taken concurrently) and AVT 224

Credits: 2.5

Lecture: 2

Lab: 1.5

AVT 223 - Commercial Pilot Single-Engine Airplane Flight I

Description: Designed for students who are both private pilot and instrument flight rated for airplane flight and are seeking the commercial single-engine pilot rating. Includes advanced airplane components, advanced aerodynamics and advanced performance.

Prerequisites: AVT 114

Corequisites: AVT 204

Credits: 3.5

Lecture: 2.5

Lab: 3

AVT 224 - Commercial Pilot Multi-Engine Airplane Flight

Description: Designed for students who are both commercial single-engine and instrument flight rated for airplane flight and are seeking the commercial multi-engine pilot rating. Includes advanced airplane components, advanced aerodynamics and advanced performance.

Prerequisites: AVT 219

Credits: 1.5

Lecture: 1

Lab: 1.5

AVT 225 - Flight Instructor Instrument Airplane Ground

Description: Instrument pilot teaching techniques utilizing Instrument Flight Rules (IFR) regulatory guidelines. Preparation to take the Federal Aviation Administration (FAA) flight instrument instructor written test and a portion of the practical exam.

Prerequisites: AVT 215

Credits: 2

Lecture: 2

Lab: 0

AVT 228 - Flight Instructor Instrument Airplane Flight

Description: Teaching flying in clouds and poor weather solely by reference to aircraft instruments. Includes teaching in a flight-training device (simulator). Preparation for Federal Aviation Administration (FAA) flight instructor instrument airplane practical exam.

Prerequisites: AVT 225 (may be taken concurrently) and AVT 222

Credits: 1.5

Lecture: 1

Lab: 1.5

AVT 260 - Fundamentals of Instruction

Description: Instructional strategies and planning, communications, student evaluation, the learning process and instructor responsibilities.

Credits: 1

Lecture: 1

Lab: 0

AVT 262 - Flight Endorsement

Description: Intended for students who may need additional flight hours in order to be endorsed by their flight instructor for FAA testing. Designed for students who are within 10 hours of endorsement and is used as a stop gap measure to prevent having to fully repeat a course that is unnecessary if within a few flight hours of success.

Credits: 1-3

Lecture: 0

Lab: 3-9

AVT 290 - Commercial Added Category- Airplane Single Engine Land

Description: Advanced Airplane flight operations and navigation including mountain flying techniques for students who are crossing over from helicopter and have obtained a commercial helicopter rating. Preparation for Federal Aviation Administration commercial pilot oral and practical test.

Prerequisites: AVT 204 (may be taken concurrently) and Commercial Rotorcraft- Helicopter rating

Credits: 6

Lecture: 2.5

Lab: 11.5

AVT 299 - Independent Study Aviation

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Behavioral Health Sciences

BHS 150 - Introduction to Behavioral Health and Social Services

Description: Survey of the behavioral health and social services professions, including scope of practice and training requirements. Exploration of employment opportunities in the field and self-assessment/academic planning for a career in mental health. Overview of mental health disorders and first responder skills in a mental health crisis situation.

Credits: 3

Lecture: 3

Lab: 0

BHS 155 - Professional Resiliency and Well-Being

Description: Exploration of building human resilience and well-being to prevent burnout, traumatic stress, and compassion fatigue for social services and mental health professionals, healthcare providers, emergency first responders, and other relationship-intense occupations. Causes, symptoms, and effects of traumatic stress, burnout, compassion fatigue, and other work-related stress. Focus on enhancing quality of life and improving a healthy lifestyle by incorporating evidence-based practices in psychological and emotional resilience training, cognitive behavioral therapy, mindfulness, positive psychology, prevention, peer support, and self-care, including nutrition, exercise, and sleep. Exploration of strategies that function as preventative medicine to help mitigate the potential harmful effects of highly stressful careers.

Credits: 3

Lecture: 3

Lab: 0

BHS 160 - Ethical, Legal and Professional Issues in Behavioral Health and Social Service

Description: Explores relevant ethical, legal, and professional issues inherent in the behavioral health and social services field, including expectations of and limitations on providers. Key areas of inquiry include boundaries and dual

relationships, mandated reporting, confidentiality, scope of practice, beneficence and non-maleficence, rights and responsibilities, professional relationships, and credentialing/regulating agencies.

Credits: 3

Lecture: 3

Lab: 0

BHS 165 - Applied Therapeutic Communication Skills

Description: Theory and practice of communication skills to establish and maintain effective helping relationships and enhance the therapeutic alliance. Emphasis on verbal communication, nonverbal communication, paraverbal communication, rapport building, empathetic and active listening skills, resolving interpersonal conflicts, appropriate feedback, and developing and maintaining personal and professional relationships.

Credits: 3

Lecture: 3

Lab: 0

BHS 170 - Case Management and Clinical Documentation

Description: Overview and application of the principles, practices, and function of case management in human services. Case management service delivery and coordination for clients with psychological, developmental, and psychiatric and comorbid medical conditions. Documentation techniques necessary to maintain clinical records in a variety of behavioral healthcare settings.

Credits: 3

Lecture: 3

Lab: 0

BHS 180 - Child, Family, and Adult Advocacy

Description: The role of advocacy in relation to multiple systems affecting children, families, and adults. Emphasis on identifying appropriate supports, community resources, and "wrap-around" services to help foster healthy family and child development, social welfare, and recovery.

Credits: 3

Lecture: 3

Lab: 0

BHS 299 - Independent Study Behavioral Health Sciences

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Biology

BIO 100 - Biology Concepts

Description: Basic principles and concepts of biology. Methods of scientific inquiry, energetics and metabolism, genetics, evolution and natural selection. Not for majors in the biological or preprofessional sciences. Duplicate credit for BIO 100 and BIO 156 will not be awarded.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

BIO 103 - Plant Biology

Description: Introduction to the growth, development, reproduction, and structure of vascular plants. Fundamental activities of plants including photosynthesis and respiration. Emphasis on agricultural and horticultural crops of Arizona. This course is cross-listed with AGS 103.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

BIO 105 - Environmental Biology

Description: Introduction to ecological systems, natural resources, and applications to environmental issues. Includes population, community, and ecosystem analysis. Emphasis on field, laboratory, and writing activities.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy, Critical Thinking

Credits: 4

Lecture: 3

Lab: 3

BIO 156 - Human Biology for Allied Health

Description: An introductory biology course for allied health majors with an emphasis on humans. Topics include fundamental concepts of cell history, histology, microbiology, and genetics. Duplicate credit for BIO 100 and BIO 156 will not be awarded.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy

Credits: 4
Lecture: 3
Lab: 3

BIO 160 - Intro to Human Anatomy and Physiology

Description: Principles of scientific method. Structural organization, homeostasis and control mechanisms of the body. Specific chemistry concepts. Structure and function of the major systems of the body.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy

Credits: 4
Lecture: 3
Lab: 3

BIO 181 - General Biology I

Description: Biological principles emphasizing structure and function at the molecular, cellular, and organismal levels of biological systems. Secondary school chemistry strongly recommended. Primarily for biology majors and preprofessional students in health-related fields.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy

Credits: 4
Lecture: 3
Lab: 3

BIO 182 - General Biology II

Description: Principles of plant and animal structure, function, and diversity; evolution, and ecology of populations and communities emphasizing biotic interactions. Primarily designed for biology and pre-professional majors.

Prerequisites: Reading Proficiency

General Education Competency: Scientific Literacy

Credits: 4
Lecture: 3
Lab: 3

BIO 196 - Directed Research: Biology

Description: Faculty or mentor directed student research in an area of current scientific investigation culminating in a final report, paper, or presentation. Students will work in the lab or in the field to gain the intellectual, technical, and practical skills necessary to further the knowledge base in an area of scientific investigation with the objective of contributing to the professional body of scientific knowledge.

Credits: 1-3

Lecture: 0

Lab: 0

BIO 201 - Human Anatomy and Physiology I

Description: Structure and function of the human body. Topics include cells, tissues, integumentary, muscular, skeletal, and nervous systems.

Prerequisites: BIO 156 or BIO 181

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

BIO 202 - Human Anatomy and Physiology II

Description: Structure and function of the human body. Topics include reproductive, endocrine, circulatory, respiratory, urinary, and digestive systems.

Prerequisites: BIO 201

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

BIO 205 - Microbiology

Description: Introduction to microorganisms and viruses of medical importance. Chemical and physical methods of microbial control; bacterial, fungal, protozoal, and viral drug therapy; the immune system response to infection; transmission of human disease; and common clinical presentation of various diseases.

Prerequisites: BIO 100 or BIO 156 or BIO 181. Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

BIO 296 - Internship: Biology

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

BIO 299 - Independent Study Biology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Brewing

BRW 100 - Essential Elements of Brewing

Description: Introduces origins, basic production methods, and identification of major beer styles. Development of sensory evaluation skills for visual, aroma, taste, and tactile components of both typical beers and faults. Must be 21 years of age or older to enroll.

Credits: 1

Lecture: 1

Lab: 0.5

BRW 110 - Brewing Equipment and Maintenance

Description: Provides a foundation in brewing equipment, brewery operation, and process design and economics. Engineering considerations including operational safety, fermentation kinetics, unit operations, and economies of scale. Maintenance and operation of brewing, packaging equipment, and warehouse machinery.

Credits: 4

Lecture: 3

Lab: 2

BRW 130 - Beer Production I

Description: Overview of the brewing process including the biological, chemical, and logistical aspects of beer production. Theory and hands-on application of cellar operations, raw materials selection, handling, malting, wort production, fermentation, and carbonation.

Credits: 3

Lecture: 2

Lab: 2

BRW 140 - Beer Production II

Description: Theory and hands-on application of advanced beer production and distribution. Quality control and analysis including the economic considerations of commercial beer production. Introduction to the taxes and governmental regulations pertaining to beer production and distribution.

Credits: 3

Lecture: 2

Lab: 2

BRW 150 - Science of Brewing

Description: The biology and chemistry of beer production. Emphasis on beer composition, analytical techniques, and the relevance of these analyses to beermaking decisions. Includes the industrial aspects of brewing, including the skills of sanitation, quality control, and analysis/trouble-shooting at each step of the brewing process. Must be 21 years of age or older to enroll.

Prerequisites: BRW 100

Credits: 2

Lecture: 1

Lab: 2

BRW 192 - Draught Systems

Description: Proper procedures for installing, maintaining, and dispensing beer through a draught system. Theory and hands-on instruction. Topics include: temperature and storage, nitrogen and carbon dioxide handling, line cleaning, and quality assurance and troubleshooting.

Credits: 1

Lecture: 1

Lab: 0.5

BRW 195 - Brewing Practicum

Description: Practical experience in beer making while working at an approved brewery and receiving supervision from a professional brewer. Must be 21 years of age or older to enroll.

Prerequisites: BRW 130

Credits: 3

Lecture: 0

Lab: 6

BRW 299 - Independent Study Brewing

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Business Administration

BSA 102 - Career Search and Success: Skills for Entering and Succeeding in the Workplace

Description: Techniques to enhance and emphasize the relationship between resume development and job search skills. Includes a strong focus on human relations in the workplace.

Credits: 1

Lecture: 1

Lab: 0

BSA 110 - Personal Finance

Description: Information for making personal and family financial decisions. Topics include financial planning, budgeting, saving, credit, insurance, investment, taxes, and retirement.

Credits: 3

Lecture: 3

Lab: 0

BSA 131 - Introduction to Business

Description: Survey of the Business discipline focusing on key topics, real world examples and guest speakers. An overview of business, global connections in business, economics, marketing, entrepreneurship, and careers in business.

Credits: 3

Lecture: 3

Lab: 0

BSA 228 - Professional Productivity Solutions

Description: Practical strategies for enhancing productivity using digital word processing tools, spreadsheets, presentations, databases, content management systems, collaboration tools, and emerging technology, preparing students for evolving workplace demands.

Prerequisites: Reading Proficiency

Credits: 3

Lecture: 3

Lab: 0

BSA 237 - Legal Environment of Business

Description: Examination of legal framework governing rules of conduct among businesses and impact on establishing business policy.

Credits: 3

Lecture: 3

Lab: 0

BSA 238 - Advanced Professional Productivity Solutions

Description: Apply advanced strategies to enhance productivity using documentation tools, advanced presentation techniques, data visualization, spreadsheets, database management, and emerging technologies. Utilize sophisticated techniques to solve complex business challenges, support decision-making, and improve workplace performance.

Prerequisites: Reading Proficiency. BSA 228 and (MAT 142 or ECN 232)

Credits: 3

Lecture: 3

Lab: 0

BSA 296 - Internship: Business Administration

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

BSA 299 - Independent Study Business

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

BSA 300 - Global Environment of Business

Description: Essential skills practiced by global business managers to identify opportunities, assess risks, and create organizational value. Cultural, political, legal, ethical, and economic factors are key topics covered. Also includes the impact of management decision-making in a global environment.

Prerequisites: Program admission. ACC 131, BSA 131, BSA 228 ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

BSA 305 - Principles of Finance

Description: Key financial concepts and how companies apply financial analysis to make sound business decisions.

Prerequisites: Program Admission. ACC 131 , BSA 131 , BSA 228 , ECN 232 , and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

BSA 310 - Logistics and Supply Chain Theory

Description: Intermediate concepts of Supply Chain Management and Logistics theory. Emphasis on inventory management, supply distribution, procurement and strategic sourcing, asset management, and risk mitigation techniques.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232 , and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

BSA 360 - Project Management Essentials

Description: Core concepts of project management based on processes of initiating, planning, executing, controlling, and closing projects. Topics include project proposals, project selection, scope definition, CPM and PERT scheduling, budgeting, control techniques, and project manager skills.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232 , and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

BSA 394 - Mentorship: Business

Description: Gain insight into specific industries and markets. Acquire feedback from business professionals on business knowledge, skills, and/or business concepts and strategies. Capitalize on opportunity to broaden industry-specific network, as well as increase applicable knowledge and technical skills. Broaden personal growth while honing personal brand. S/U grading only.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 0

Lab: 0

BSA 400 - Business Policy and Strategic Planning

Description: Introduces key concepts and tools for strategy formulation and competitive analysis. Focuses on the skills and business judgment required to devise strategies that position the firm to maximize long-term profits under conditions of uncertainty and competition. The firm is viewed holistically by integrating policies for each functional area into an overall competitive strategy.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

BSA 410 - Business Analytics

Description: Investigation of the role of an Analyst, the growing role of big data, and quantitative strategies. Use of statistical techniques for analyzing data for decision-making, answering business questions, and solving problems.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

BSA 494 - Capstone Project: Business

Description: Students will engage in a supervised project or case study, applying business concepts and theories from previous coursework. Under faculty guidance, students will address a real-world business challenge, develop a business plan, or explore a business concept. The capstone experience emphasizes critical thinking, problem-solving, and evaluation of business solutions in a practical context. S/U grading only.

Prerequisites: Program Admission. BSA 394.

Credits: 3

Lecture: Varies

Lab: Varies

BSA 495 - Research Project: Business

Description: Students will engage in an independent research project under the supervision of a faculty advisor, applying business concepts and research methods from previous coursework. With faculty guidance, students will identify a research problem, conduct a literature review, and apply research methodology to prepare a comprehensive report. The course culminates in a comprehensive research paper and presentation. S/U grading only.

Prerequisites: Program Admission. BSA 394.

Credits: 3

Lecture: Varies

Lab: Varies

BSA 496 - Internship Capstone: Business

Description: Senior-level supervised field experience intended to build upon previous coursework, linking the theoretical with day-to-day practical applications by applying subject knowledge relevant to the workplace. Under the guidance of a faculty member and organization/industry representative, students will establish specific learning objectives and goals. S/U grading only.

Prerequisites: Program Admission. BSA 394.

Credits: 3

Lecture: Varies

Lab: Varies

Construction Building Technology

CBT 100 - Basic Carpentry I

Description: Introduction to carpentry safety, hand and power tool operation, blueprint reading, materials, and layout. Hands-on experience in cutting, fastening, footings, framing, assembly, door/window installation, flooring, and finishing.

Credits: 8

Lecture: 1

Lab: 14

CBT 101 - Plan Reading, Drawings, and Codes

Description: Interpreting construction drawings and documents. Topics include sizing, selecting materials, and calculating code requirements. Provides the opportunity for students to certify in OSHA 10.

Credits: 2

Lecture: 1

Lab: 3

CBT 102 - Framing I

Description: An introductory course in the methods and materials necessary to build a wood framed building. Includes hands-on practice in the framing of floors, walls, and ceilings.

Credits: 2

Lecture: 1

Lab: 3

CBT 103 - Masonry & Concrete

Description: Introduces concrete and masonry finishes for residential builds.

Credits: 2

Lecture: 1

Lab: 3

CBT 104 - Framing II

Description: Reinforcement of skills learned in Framing I with hands-on practice in the framing of roofs, walls and stairs.

Credits: 2

Lecture: 1

Lab: 3

CBT 105 - Interior Finishes

Description: Introduction to the safe use of hand and power tools used for finish carpentry. Lab work includes installing interior finishes to a structure using techniques.

Credits: 2

Lecture: 1

Lab: 3

CBT 106 - Remodeling

Description: Preparation for home improvement projects. Emphasis on basic carpentry and interior remodeling techniques including training with common remodeling tools, wood framed systems, tile, drywall, and paint improvements.

Credits: 2

Lecture: 1

Lab: 3

CBT 107 - Exterior Finishes

Description: Information and techniques involved in choosing, preparing and installing a variety of different exterior wall, roof, door and window finishes, relating to residential construction.

Credits: 2

Lecture: 1

Lab: 3

CBT 108 - Trim Work

Description: A wide variety of projects and technical information that will provide the experience of installing interior trim, cabinets, and hardware.

Credits: 2

Lecture: 1

Lab: 3

CBT 110 - Basic Carpentry II

Description: Reinforcement of skills learned in Basic Carpentry I with hands-on experience in cutting, fastening, footings, framing, assembly, door/window installation, flooring, and finishing.

Prerequisites: CBT 100

Credits: 8

Lecture: 1

Lab: 14

CBT 112 - Plumbing Codes & Standards, Blueprint, and Design

Description: Introduction to reading, interpreting, and applying plumbing blueprints on the jobsite, including basic understanding of plumbing-specific symbols. Focuses on plumbing codes and standards, and how code requirements apply to plumbing drawings. Also includes plumbing mathematics and how to apply it to on-the-job situations.

Credits: 2

Lecture: 1

Lab: 2

CBT 113 - Basic Electricity for the Trades

Description: Basic principles of Alternating Current (AC) and Direct Current (DC) electricity. Examination of the structures and functions of AC and DC circuits including series, parallel and series-parallel circuits. Includes an overview of electric systems and their applications in the utility industry.

Credits: 4

Lecture: 3

Lab: 2

CBT 115 - Basic Residential Electrician

Description: Safely install, operate, maintain, and repair residential AC and DC, catv and data systems. Includes the principles of electrical systems, wiring, power transmission, cable TV and data systems safety, and applicable codes and standards.

Credits: 3

Lecture: 2

Lab: 2

CBT 120 - Basic Residential Plumbing

Description: Basic knowledge and skills used in the residential plumbing trade. Includes safety, materials, measurement, and installation of water, waste, and gas plumbing systems.

Credits: 5

Lecture: 3

Lab: 4

CBT 212 - Drain, Waste, and Vent Systems

Description: Introduction to plumbing drain, waste, and vent systems. Exploration of alternative waste systems and plumbing supply systems.

Credits: 1
Lecture: 0
Lab: 2

CBT 250 - Introduction to 3-D Concrete Printing

Description: Safe assembly, operation, and maintenance of a 3-D concrete printer. Includes the various component ratios of mortar, including admixtures, and how different ratios affect the placement and workability of mix designs.

Credits: 4
Lecture: 1
Lab: 6

CBT 299 - Independent Study Construction Building

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Commercial Driver Training

CDT 200 - Commercial Driver Refresher/Extender

Description: Designed for the student who currently holds a Commercial Class A or B permit or license. Hands on and classroom instruction provide additional training for the commercial driver to polish their road skills and brush up on the rules of the road. Behind the wheel training, pre-trip, intersections, cargo, log books, city driving.

Credits: 2
Lecture: 1
Lab: 2

CDT 250 - Commercial License Prep

Description: Preparation for the state commercial drivers license (CDL) permit exam covering the General Knowledge exam, Air Brake exam, and Combination exam. Includes hours of driver service, coupling and uncoupling a tractor and trailer, cargo handling, hazardous materials, pre-trip inspection, braking maneuvers, and trip planning. Following the AZ CDL Permit exam, topics include managing a professional driver's life, managing speed and space effectively, and road and weather condition response. Must be at least 18 years of age, have a valid Driver's License (held for at least one year), pass a state-approved physical exam, and show proof of legal presence in the U.S. Students wishing to drive across state lines must be 21 years of age or older.

Credits: 1
Lecture: 1
Lab: 0

CDT 255 - Commercial Behind the Wheel

Description: Demonstration and skill development of basic maneuvers of driving a combination vehicle. Driving proficiency development includes performing Pre-Trip Inspection to FMCSA Standards, basic control skills in backing, and operation of a Class A vehicle on public roadways. Also includes proper techniques for performing visual search, shifting, turning, space and speed management, and hazard perception. Preparation for Commercial Driver's License (CDL) skill examination. Student will be responsible for all fees associated with the ADOT CDL Road Test.

Disclaimer: Completion of this course does not guarantee Class A licensure. You may need to enroll in an additional course to achieve competency required to pass ADOT road exam.

Prerequisites: CDT 250 or a valid CDLA permit.

Credits: 17

Lecture: 9

Lab: 16

CDT 299 - Independent Study Commercial Driver Training

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Chemistry

CHM 130 - Fundamental Chemistry

Description: Introduction to the study of chemistry as a basis for understanding our complicated world. Overview of classification, structure, and chemical behavior, including inorganic, organic, and biological materials.

Prerequisites: MAT 092 or one year of high school algebra or satisfactory score on mathematics skills assessment. Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

CHM 151 - General Chemistry I

Description: Exploration of chemical measurement, classification, stoichiometry, and structure/function relationships for inorganic, organic and biological materials. Chemical principles are presented at a level appropriate for science majors and pre-professional students.

Prerequisites: MAT 097 or higher or two years of high school algebra. Reading Proficiency.

Credits: 4
Lecture: 3
Lab: 3

CHM 152 - General Chemistry II

Description: Advanced topics in general chemistry including chemical kinetics, equilibrium, acid-base, and electrochemistry. Chemical principles are presented at a level appropriate for science majors and pre-professional students.

Prerequisites: CHM 151

Credits: 4
Lecture: 3
Lab: 3

CHM 196 - Directed Research: Chemistry

Description: Faculty or mentor directed student research in an area of current scientific investigation culminating in a final report, paper, or presentation. Students will work in the lab or in the field to gain the intellectual, technical, and practical skills necessary to further the knowledge base in an area of scientific investigation with the objective of contributing to the professional body of scientific knowledge.

Credits: 1-3
Lecture: 0
Lab: 0

CHM 296 - Internship: Chemistry

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies
Lab: Varies

CHM 299 - Independent Study Chemistry

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

College Honors Program

CHP 190 - Honors Colloquium

Description: Critical thinking topics for College Honors Program participants.

Prerequisites: Admission to the College Honors Program. Reading Proficiency.

Credits: 1

Lecture: 1

Lab: 1

CHP 230 - Leadership Development Studies

Description: Designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates readings from the humanities, experiential exercises, films, and contemporary readings on leadership.

Prerequisites: Acceptance into Honors Program.

Credits: 3

Lecture: 3

Lab: 0

CHP 296 - Internship: College Honors

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

CHP 299 - Independent Study College Honors

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Computer Numerical Control

CNC 101 - CNC Machine Operator

Description: Basic principles and operative skills in the operation of CNC milling machine and lathes.

Credits: 2
Lecture: 1
Lab: 3

CNC 102 - CNC Machine Setup

Description: Basic principles and operative skills to set up and operate through 1st. article part CNC mills and lathes.

Prerequisites: CNC 101

Credits: 2
Lecture: 1
Lab: 3

CNC 198 - CNC Topics:

Description: Exploration of CNC topics outside of our standard curriculum.

Credits: 1-3
Lecture: Varies
Lab: Varies

CNC 201 - Computer Aided Programming for CNC

Description: Two-dimensional designing of machinery parts using industry-standard software. Includes design and illustration of the part, tooling sequencing, starting a lathe using industry-standard software, part cutting simulation, and Numerical Control Code.

Prerequisites: CNC 101 (may be taken concurrently)

Credits: 3
Lecture: 2
Lab: 2

CNC 202 - 3-D Programming and Rapid Prototyping for CNC

Description: Basic principles of 3-D programming and rapid prototyping for modern manufacturing applications.

Prerequisites: CNC 201

Credits: 4
Lecture: 3
Lab: 3

CNC 299 - Independent Study Computer Numerical Control

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Computer Networking Technology

CNT 101 - Networking and Cybersecurity Fundamentals

Description: Essential skills practiced in the networking and cybersecurity professions. Network device operation and configuration, network protocols, network security, and troubleshooting are key topics of discussion with hands-on activities. The latest networking standards and technologies are covered.

Credits: 4

Lecture: 3

Lab: 2

CNT 105 - Cybersecurity Principles

Description: Foundation knowledge and essentials skills in all security domains in the cyber world - information security, systems security, network security, mobile security, physical security, ethics and laws, related technologies, defense and mitigation techniques used in protecting businesses.

Credits: 3

Lecture: 2

Lab: 2

CNT 110 - A+ Computer Technician Certification

Description: Install, configure, support, and troubleshoot personal computers. Emphasis on personal computer hardware and software, operating systems, networking, mobile devices, and security. Preparation for the Comp TIA A+ Certification exam.

Credits: 4

Lecture: 3

Lab: 3

CNT 118 - Operating System Fundamentals

Description: An introduction to operating system concepts and functions. Topics include memory management, processes and threads, file systems, networking, virtualization, and operating system security.

Prerequisites: CNT 101 or CNT 110

Credits: 3

Lecture: 2

Lab: 2

CNT 120 - Introduction to Windows Server

Description: Introduction to the Windows Server line of network operating systems. Topics include installation, file systems, networking, directory services, file and printer sharing, and security. Extensive hands-on exercises with realistic scenarios to help students apply new concepts and sharpen problem-solving skills.

Prerequisites: CNT 101 or CNT 110

Credits: 3

Lecture: 2

Lab: 3

CNT 131 - Linux System Administration

Description: Installation, management, and support of the Linux operating system. Advanced topics including disk management, configuration of network services, and security.

Prerequisites: CNT 118

Credits: 3

Lecture: 2

Lab: 3

CNT 135 - Security+: Implementing and Maintaining Network Security

Description: Network security concepts, communication security, network infrastructure security, basics of cryptography and operational/organizational security. Emphasis on network authentication and authorization, securing network devices and services, virus remedies, preventing network attacks, and securing remote access. Prepares students for the Comp/TIA Security+ certification.

Prerequisites: CNT 105 or CNT 110

Credits: 3

Lecture: 2

Lab: 3

CNT 140 - Cisco Routing and Switching I

Description: Study of computer networking standards and operation. Includes network topologies, network protocols and communications, network addressing, network device configuration, network design, and network security. First of three courses to prepare students to pass the Cisco Certified Network Associate (CCNA) certification examination.

Prerequisites: CNT 101

Credits: 4

Lecture: 3

Lab: 2

CNT 150 - Cisco Routing and Switching II

Description: Network routing and switching concepts and configuration. Includes static and dynamic routing, switch and VLAN configuration, LAN security, wireless LAN configuration, and router troubleshooting. Second of three courses to prepare students to pass the Cisco Certified Network Associate (CCNA) certification examination.

Prerequisites: CNT 140

Credits: 3

Lecture: 2

Lab: 2

CNT 160 - Cisco Routing and Switching III

Description: Network routing protocols, router and protocol security, network management and design concepts in a medium to large network. Includes configuration and troubleshooting of dynamic routing protocols, WAN concepts, access control and network address translation. Network virtualization and automation concepts are also discussed. Third of three courses to prepare students to pass the Cisco Certified Network Associate (CCNA) certification examination.

Prerequisites: CNT 150

Credits: 3

Lecture: 2

Lab: 2

CNT 190 - Programming and Scripting for Network Admins

Description: Structured programming and scripting introduction with emphasis on application to network and server administration. Topics include algorithms, problem solving, Boolean logic, variables, control structures, and secure coding concepts. Python and PowerShell languages are covered.

Prerequisites: CNT 101

Credits: 3

Lecture: 2

Lab: 2

CNT 235 - Cybersecurity Operations

Description: Advanced network security concepts and techniques used in a Security Operations Center (SOC) to find threats on a network using a variety of popular security tools. Preparation for Cisco Certified CyberOps Associate certification.

Prerequisites: CNT 135 and CNT 150

Credits: 3

Lecture: 2

Lab: 3

CNT 250 - Securing Network Devices

Description: Advanced course on installation, configuration and operation of network security on Cisco routers and firewalls: AAA, access control, intrusion detection, NAT, and VPNs.

Prerequisites: CNT 150

Credits: 3

Lecture: 2

Lab: 3

CNT 260 - Cybersecurity Forensics

Description: Application of cybersecurity forensics techniques with a focus on investigating and analyzing network traffic and understanding legal requirements. Use of common digital forensics tools to gather, analyze and preserve evidence in response to an incident.

Prerequisites: CNT 118 and CNT 135

Credits: 3

Lecture: 2

Lab: 2

CNT 275 - Penetration Testing and Vulnerability Assessment

Description: Penetration testing and vulnerability assessment of computer networks. Learn to set up a cybersecurity lab for practicing information gathering and identifying and exploiting vulnerabilities. Ethical considerations, careers in ethical hacking, frameworks, and methodologies are examined.

Prerequisites: CNT 135 and CNT 190

Credits: 3

Lecture: 2

Lab: 3

CNT 293 - CNT Project: Cybersecurity

Description: Incorporation of project design, project system analysis, and technology applications with a focus on cybersecurity.

Prerequisites: CNT 235 and CNT 250 and CNT260

Credits: 2

Lecture: 2

Lab: 0

CNT 294 - CNT Project

Description: Incorporation of project design, project system analysis, and technology applications.

Credits: 2

Lecture: 2

Lab: 0

CNT 296 - Internship: Computer Networking Technology

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree or certificate requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

CNT 299 - Independent Study Computer Networking Technology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Communications

COM 100 - Introduction to Human Communication

Description: Introduction to the essential elements of human communication and behavior, with emphasis on intrapersonal, interpersonal, group, public communication, and oral communication skills important to personal and professional settings.

Prerequisites: Reading Proficiency

General Education Competency: OPTIONS/Written Communication

Credits: 3

Lecture: 3

Lab: 0

COM 131 - Fundamentals of Speech Communication

Description: Study of the essential elements of oral communication, with major emphasis on public speaking. Includes use of multimedia technologies for presentations.

Prerequisites: Reading Proficiency

Credits: 3

Lecture: 3

Lab: 0

COM 134 - Interpersonal Communication

Description: Build healthy personal and professional relationships. Includes listening, coping with criticism, resolving conflicts, managing emotions, nonverbal communication, and developing empathy for gender and cultural differences.

Prerequisites: Reading Proficiency

General Education Competency: OPTIONS/Written Communication

Credits: 3

Lecture: 3

Lab: 0

COM 296 - Internship: Communication

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

COM 299 - Independent Study Communication

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Career and Personal Development

CPD 104 - Career and Personal Development

Description: Career/life planning through self-awareness and understanding. Focus is on dealing with change, decision making, goal setting and understanding lifestyles as well as evaluating interests, skills and values. Emphasis on the development of a comprehensive career search process including current occupational information, specific tools for researching the job market and acquiring employment.

Credits: 3

Lecture: 3

Lab: 0

Computer Systems and Application

CSA 107 - Technology Networking Tools (TNT)

Description: Designed for users in diverse settings (Personal and Professional). Emphasis on systematic processes for designing, developing, evaluating, and implementing technology effectively. These technologies can impact productivity, creativity, and communication.

Credits: 1

Lecture: 1

Lab: 0

CSA 110 - Introduction to Computer Information Systems

Description: Business information systems from a business intelligence perspective. Includes the uses of application software with emphasis on database and spreadsheet packages for efficient and effective problem solving.

Credits: 3

Lecture: 3

Lab: 0

CSA 125 - Microsoft Outlook

Description: Introduces the basic features of Microsoft Outlook to send, receive and manage e-mail, organize schedules and events, and maintain contact lists, to-do lists, and tasks. Emphasizes the Outlook skills necessary in business environments. Preparation for the Microsoft Office Specialist exam for Microsoft Outlook.

Credits: 1

Lecture: 1

Lab: 0

CSA 126 - Microsoft Office for Windows

Description: Introductory concepts and techniques of Microsoft Office including Word, Excel, Access, and PowerPoint.

Credits: 3

Lecture: 3

Lab: 0

CSA 138 - Microsoft Excel

Description: Practical application on the basic functions of Microsoft Office Excel using the Windows Operating System. Emphasis on creating worksheets for data input and analysis.

Credits: 2

Lecture: 2

Lab: 0

CSA 139 - Microsoft Access

Description: Practical application of Microsoft Access using the Windows Operating System. Emphasis on relational databases and query design to summarize and analyze information.

Credits: 2

Lecture: 2

Lab: 0

CSA 140 - Microsoft Word

Description: Practical application of Microsoft Office Word using the Windows Operating System.

Credits: 2

Lecture: 2

Lab: 0

CSA 142 - Microsoft PowerPoint

Description: Practical application of Microsoft PowerPoint using the Windows Operating System.

Credits: 2

Lecture: 2

Lab: 0

CSA 172 - Microsoft Windows

Description: Introduction to the Microsoft Windows operating system for personal computers. Customize, optimize, secure and maintain Windows; utilize accessory apps, desktop settings, manage peripheral devices, folders and files.

Credits: 2

Lecture: 1

Lab: 2

CSA 214 - Foundations of Data Science

Description: A practical introduction to the field of Data Science and familiarity with the essential facets of the data scientist profession. Emphasis on data-based reasoning, problem formulation, data collection, data pre-processing, data analytics, visualization, and the ethics surrounding the use of data and its processing. Includes how to extract strategic business insights from data, efficiently communicate them to stakeholders, and build models to predict future trends and use them to inform business strategy.

Credits: 3

Lecture: 3

Lab: 0

CSA 250 - Introduction to Artificial Intelligence

Description: This course is based on Intel AI for Workforce. Basic concepts and applications of Artificial Intelligence (AI), including AI project cycles. Focus on issues surrounding AI including ethics, bias, culture, regulations, and professional expectations.

Credits: 3

Lecture: 3

Lab: 0

CSA 281 - Systems Analysis and Design

Description: Advanced analysis, design, and development of an information system. Emphasis on users' needs, available equipment, manpower and financial feasibility. Problem analysis and solution design using a combination of tools and techniques.

Prerequisites: CSA 110 and CSC 105

Credits: 3

Lecture: 3

Lab: 0

CSA 282 - Database Concepts

Description: Concepts, design, implementation, evaluation, and maintenance techniques of databases. Includes fundamentals of data model, data structure and data management.

Credits: 3

Lecture: 3

Lab: 0

CSA 294 - CSA Project

Description: This Capstone course incorporates project design, project system analysis, and technology applications. Approval of Division Dean.

Prerequisites: CSA 126 and CSA 281 and CSA 282 and CSC 105

Credits: 1-6

Lecture: 1-6

Lab: 0

CSA 296 - Internship: Computer Systems and Applications

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies
Lab: Varies

CSA 299 - Independent Study Computer Systems and Applications

Description: Supervised special project in this field of study. Approval of supervising Division Assistant/Associate Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

CSA 310 - Advanced Artificial Intelligence

Description: Expands understanding of core artificial intelligence concepts to enable the design of intelligent agents and advanced machine learning systems. Projects assess complex approaches for knowledge representation, reasoning, perception, prediction, planning, and decision-making.

Prerequisites: CSA 250

Credits: 4
Lecture: 3
Lab: 2

CSA 315 - Software Engineering for the Cloud

Description: Applies software engineering best practices to architect secure, resilient cloud applications and infrastructure. Introduce leading cloud providers and automation approaches and leverage Infrastructure-as-Code capabilities.

Prerequisites: CSC 105 , CSC 113, and CSA 281

Credits: 3
Lecture: 3
Lab: 0

CSA 320 - Advanced Data Science

Description: Advanced data analytics techniques to reveal insights from real-world data at scale by mastering best practice methodologies. Focus on interpreting findings, identifying issues, and communicating data-based solutions to organizational priorities through robust visual and analytical capabilities.

Prerequisites: CSA 110 and CSA 214

Credits: 3
Lecture: 3
Lab: 0

CSA 345 - Information Technology Management

Description: Management methodologies spanning IT projects, assets, vendor relationships, and service delivery coordinated to improve technology ROI through alignment, cost optimization, agreements, automation, and data-driven insights.

Prerequisites: CSA 110

Credits: 4

Lecture: 4

Lab: 0

CSA 355 - Advanced Programming Techniques

Description: Apply concurrent programming constructs, optimization strategies, design patterns, and language-specific advanced features to simplify development, improve performance, and promote reuse of complex enterprise-scale software systems.

Prerequisites: CSC 105 and CSC 113

Credits: 4

Lecture: 4

Lab: 0

CSA 390 - IT Project Management

Description: Apply project management principles to lead complex IT initiatives. Draft project charters, plans, and documentation meeting rigid schedule, cost, and scope constraints. Utilize Agile frameworks to deliver solutions balancing speed, quality and changing requirements.

Prerequisites: CNT 105 , CSA 110 , CSA 281, and CSC 105

Credits: 4

Lecture: 4

Lab: 0

CSA 420 - Ethics in Information Technology

Description: Examine the ethical implications of technologies, algorithms, data usage, and system design tradeoffs. Evaluate existing organizational policies through lenses of transparency, accountability, unintended consequences, and effects on vulnerable populations. Propose ethically-aligned policies, controls and technical approaches rooted in philosophical foundations.

Prerequisites: PHI 105

Credits: 3

Lecture: 3

Lab: 0

CSA 440 - Software Assurance

Description: Incorporate security practices throughout the software development lifecycle according to industry standards. Implement secure design patterns and program defensively to minimize vulnerabilities. Conduct dynamic analysis, fuzzing and penetration testing to identify and remediate risks.

Prerequisites: CSA 345

Credits: 4

Lecture: 4

Lab: 0

CSA 450 - Big Data Architecture

Description: Design and implement secure, scalable systems leveraging cluster computing, cloud infrastructure, and specialized big data platforms to achieve efficient and flexible storage, processing, and analytics of data lakes and complex datasets.

Prerequisites: CSA 310

Credits: 4

Lecture: 4

Lab: 0

CSA 470 - Disruptive Technologies

Description: Investigate breakthrough and rapidly evolving technologies like quantum computing, ambient intelligence, augmented reality, and other advances exhibiting potential for transformation across the technology landscape.

Prerequisites: CSA 310 and CSA 320

Credits: 4

Lecture: 4

Lab: 0

CSA 494 - Project Capstone: Computer Science

Description: Participate in cross-functional teams through the full system development lifecycle to build innovative solutions that address real-world problems or opportunities. Build upon previous coursework, linking the theoretical with practical applications by applying subject knowledge relevant to a semester project.

Prerequisites: CSA 345, CSA 420 (may be taken concurrently), and CSA 450 (may be taken concurrently).

Credits: 4

Lecture: 0

Lab: 8

CSA 495 - Practicum: Computer Science

Description: Application of the computer science curriculum's topics through hands-on experience. Focus on group problem-solving skills. Work in teams to complete instructor-guided semester-length software project.

Prerequisites: CSA 420 and CSA 450

Credits: 4

Lecture: 2

Lab: 4

CSA 496 - Internship: Computer Science

Description: Supervised field experience intended to build upon previous coursework, linking the theoretical with day-to-day practical applications by applying subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills. S/U grading only.

Prerequisites: CSA 110, CSA 250, CSA 420, and CSA 450

Credits: 4

Lecture: 0

Lab: 8

CSA 498 - Special Topics in Computer Science

Description: Concentrated research study in an emerging computer science topic, current literature analysis, and direct industry engagement. Select from a wide array of modern computing areas: mobile apps, AI, Augmented or Mixed realities, designing databases and web applications, networking, computer security, parallel programming architecture, algorithms and computing models, operating systems, and more.

Prerequisites: CSA 390

Credits: 4

Lecture: 4

Lab: 0

Computer Science

CSC 105 - Introduction to Programming

Description: An introduction to computer programming concepts and problem solving skills. Pseudocode, flowcharting and code writing will be used to design and develop software solutions.

Credits: 3

Lecture: 3

Lab: 0

CSC 113 - Programming: Python

Description: An introduction to the core principles of Python. Topics includes analyzing, designing, coding, testing and debugging Python programs.

Prerequisites: CSC 105

Credits: 3

Lecture: 3

Lab: 0

CSC 125 - Programming: C# Fundamentals

Description: Core principles of C# and the .Net framework will be used to solve real-world problems. Graphical User Interface based applications that utilize forms and controls will be designed, constructed and tested.

Prerequisites: CSC 105

Credits: 3

Lecture: 3

Lab: 0

CSC 205 - Programming: JavaScript, HTML & CSS

Description: Fundamentals of web page and website creation using basic JavaScript, HTML5 and CSS3 features.

Prerequisites: CSC 105 (may be taken concurrently)

Credits: 3

Lecture: 3

Lab: 0

CSC 211 - Programming: PHP and MySQL

Description: Principles and techniques of developing small to medium scale database applications and creating web databases that are accessed by Web pages.

Prerequisites: CSC 105 (may not be taken concurrently) and CSA 282 (may be taken concurrently)

Credits: 3

Lecture: 3

Lab: 0

CSC 220 - Programming: Java

Description: Core principles of the Java programming language including a focus on object oriented programming and advanced programming concepts.

Prerequisites: CSC 105

Credits: 3

Lecture: 3

Lab: 0

CSC 299 - Independent Study Computer Science

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Culinary Arts

CUL 101 - Culinary Principles

Description: Introduction to the culinary industry. Includes food service terminology, customer service skills, menu development, safety, sanitation, knife cuts, commercial equipment, cooking techniques, product identification, and ratios/weights/measures. Utilizes the ServSafe materials prepared by the National Restaurant Association Education Foundation to prepare students for a national examination.

Credits: 4

Lecture: 4

Lab: 0

CUL 102 - Culinary Fundamentals: Hot Foods

Description: Cooking techniques and preparation of meat, fish and poultry items. Theory and practice of production of vegetables, stocks, sauces, and soups. Study of butchering, yields, purchasing and grade classification.

Credits: 4

Lecture: 2

Lab: 4

CUL 103 - Culinary Fundamentals: Breakfast & Garde Manger

Description: Cooking techniques and preparation of breakfast items, salads, sandwiches and dressings. Production of eggs, pasta, cheeses, and fruit dishes, canapés and hors d'oeuvres creations. Study of lettuces, fruits, grains, cheeses and dressings.

Credits: 4

Lecture: 2

Lab: 4

CUL 104 - Culinary Fundamentals: Baking & Pastry

Description: Cooking techniques and preparation methods for cakes, pies, cookies and simple desserts as well as production of dough and breads. Includes preparation of various bakery sauces and toppings, uses of chocolates, and appropriate presentation methods for various types of desserts.

Credits: 4

Lecture: 2

Lab: 4

CUL 110 - Cake Decorating Basics

Description: Design and produce a variety of cakes for special occasions. Decorating and finishing techniques such as flowers, borders, writing styles and air brushing will be emphasized.

Credits: 3

Lecture: 1

Lab: 4

CUL 111 - Food Purchasing and Cost Control

Description: Methods to control costs in a food service operation while making a profit. Focus is on principles and procedures of an effective food purchasing system. Preparation for ServSafe certification.

Credits: 3

Lecture: 3

Lab: 0

CUL 112 - Plated Desserts

Description: The art of plating and presenting desserts as an integral part of the dining experience. Includes cold and hot desserts such as strudels, cobblers, parfaits, crepes, ice cream, sorbets and sherbets.

Credits: 4

Lecture: 2

Lab: 4

CUL 113 - Pastry Centerpieces and Wedding Cakes

Description: Creation of wedding cakes and practical pastry centerpieces for table and buffet presentations. Includes hands-on techniques applied to common mediums like sugar, chocolate, butter cream, royal icing and fondant.

Credits: 4

Lecture: 2

Lab: 4

CUL 296 - Internship: Culinary Arts

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

CUL 299 - Independent Study Culinary Arts

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Dance

DAN 110 - Ballet I

Description: The elements of classical ballet technique. Emphasis on movement quality and artistic expression.

Credits: 2

Lecture: 0

Lab: 4

DAN 111 - Modern Dance

Description: The elements of modern dance technique. Emphasis on movement quality and artistic expression.

Credits: 2

Lecture: 1

Lab: 2

DAN 114 - Jazz I

Description: The fundamentals of Jazz Dance and techniques.

Credits: 2

Lecture: 0

Lab: 4

DAN 115 - Tap I

Description: The fundamentals of tap dance and tap techniques.

Credits: 2

Lecture: 0

Lab: 4

DAN 120 - Ballet II

Description: Theory and practice of ballet at the accelerated beginning level. Development of movement quality and performance skills.

Prerequisites: DAN 110

Credits: 2

Lecture: 0

Lab: 4

DAN 134 - Fox Trot, Waltz and Tango

Description: Basic and beginning moves for the Fox Trot, Waltz and Tango. Includes movement, music and rhythm.

Credits: 1

Lab: 2

DAN 136 - Rumba, Cha Cha and Swing

Description: Basic and beginning moves for the Rumba, Cha Cha, and Swing. Includes movement, music and rhythm.

Credits: 1

Lab: 2

DAN 151 - Applied Dance

Description: Individual instruction in any level of a variety of dance forms, including but not limited to Contemporary, Modern, Ballet and Pointe, Jazz, Creative Movement, Fundamentals of Partnering, Hip-Hop, BeMoved©, Gentle BeMoved©, and European and Latin Ballroom.

Credits: 2

Lecture: 0

Lab: 0

DAN 198 - Dance Topics:

Description: Exploration of partner dance styles.

Credits: 1-3

Lecture: 0

Lab: 2-6

DAN 198A - Dance Topics:

Description: Exploration of partner dance styles.

Credits: 1-3

Lecture: 0

Lab: 2-6

DAN 198B - Dance Topics:

Description: Exploration of partner dance styles.

Credits: 1-3

Lecture: 0

Lab: 2-6

DAN 296 - Internship: Dance

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

DAN 299 - Independent Study Dance

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Early Childhood Education

ECE 190 - Child Development Associate (CDA) Portfolio Preparation

Description: Preparation for application to the Council of Professional Recognition to receive the Child Development Associate (CDA). Development of a professional resource file that includes evidence of competencies achieved through the Early Childhood Education Basic Core certificate.

Prerequisites: ECE 200 and ECE 230 and ECE 240 and ECE 260 (all may be taken concurrently)

Credits: 3

Lecture: 3

Lab: 0

ECE 200 - Introduction to Early Childhood Education

Description: History, perspectives and current trends in the field of early care and education. Exploration of career options within the field of working with children from birth to age eight. Includes child development theorists and their relation to program philosophies and curricula. This course requires 5 face-to-face observation hours in an early childhood setting.

Credits: 3

Lecture: 3

Lab: 0

ECE 202 - Early Childhood Curriculum

Description: Development of learning activities based on the needs of preschool age children. Selection and preparation of the environment as well as materials which are basic to diverse preschool programs. Emphasis on the process of lesson planning in response to developmental levels of children. Includes the compilation of a personal file of teaching ideas, activities and resources and the exploration and construction of materials to be used while working with children, and play-based teaching strategies. This course requires 5 face-to-face observation hours in an early childhood setting.

Credits: 3

Lecture: 3

Lab: 0

ECE 222 - Introduction to the Exceptional Learner

Description: Overview of various types of learners with special needs including children with disabilities, gifted learners, and children at risk birth to grade 12. Includes topics on public laws related to individuals with disabilities, identification and assessment of children, characteristics of exceptional learners, inclusion, coordinating with various agencies and specialists, and planning, delivering, and documenting educational services. This course requires 10 face-to-face observation hours in a special needs or full inclusion setting. This course is cross-listed with EDU 222.

Credits: 3

Lecture: 3

Lab: 0

ECE 230 - Language and Literacy Experiences

Description: Language and literacy processes and the way in which literature enriches a child's development. Review of children's literature and methods of enhancing literacy experiences. This course is cross-listed with EDU 230.

Credits: 3

Lecture: 3

Lab: 0

ECE 234 - Child Development

Description: Exploration of children's development from conception through adolescence, assuming a transactional approach to understanding development focusing on family relationships, brain development, social/emotional development, and the role of culture in child development. Examination of major developmental themes and theories of child development utilizing scientific methods of inquiry and viewed through a cultural lens. Risk and protective factors are analyzed with respect to the interplay of attachment, brain development, and social-emotional development. Developmental periods include prenatal, infancy, toddlerhood, preschool years, middle childhood, and adolescence, with an examination of biological influences, cognition, behavioral characteristics, social interaction, and cultural resources typified at each developmental period. This course requires 5 face-to-face observation hours in early childhood and elementary settings. This course is cross-listed with PSY 234.

Credits: 3
Lecture: 3
Lab: 0

ECE 240 - Family and Community Partnerships

Description: School and family relationships with a focus on communication, ethics, professionalism and problem-solving. Impact of the community, its resources and referral systems. Emphasis on families, diversity, multicultural issues and parent involvement. This course is cross-listed with EDU 240.

Credits: 3
Lecture: 3
Lab: 0

ECE 250 - Leadership and Management in Early Childhood Programs

Description: Overview of the responsibilities and tasks involved in managing and leading a quality early childhood program. Relationship of program philosophy and goals to program design, including: staffing structure, facility and equipment, budget development, program policies and relationships with families. Emphasis on the importance of shared vision, effective leadership, and a commitment towards advancing the professionalism of the early childhood education field.

Prerequisites: ECE 200 and ECE 202 and ECE 234/PSY 234 (prerequisites may be taken concurrently).

Credits: 3
Lecture: 3
Lab: 0

ECE 260 - Child Guidance

Description: Proactive relationship-based strategies that promote attachment and the social and emotional needs of young children. Focus on strength-based guidance strategies and developmentally appropriate guidance approaches. Emphasis on trauma-informed, brain-based approaches to behavior intervention. This course requires 5 face-to-face observation hours in an early childhood setting.

Credits: 3
Lecture: 3
Lab: 0

ECE 270 - Health, Safety and Nutrition

Description: Nutrition education, menu planning, childhood diseases and illness, and sanitation and safety in group settings. Protecting the health and safety of young children and promoting the development of lifelong health habits. Communication with health professionals and parents on health, safety, and nutrition issues. This course meets DES requirements for Health, Safety and Nutrition training.

Credits: 3
Lecture: 3
Lab: 0

ECE 280 - Observation and Assessment of the Young Child

Description: Developmentally appropriate, culturally responsive observation and assessment strategies for studying the physical, cognitive, language, social, and emotional development of young children (birth to eight years). Special focus on the development of skills with observation strategies, developmental screenings, and systematic documentation to promote an understanding of child development and to design appropriate programs, environments, and activities. This course requires 30 face-to-face observation hours in an early childhood setting.

Prerequisites: ECE 200

Credits: 3

Lecture: 2

Lab: 2

ECE 291 - Early Childhood Practicum

Description: Directed field experiences with young children (birth to eight years) in varied early childhood education settings; applying child development theories and principles in support of developmentally effective approaches; planning and facilitating small and large group play-based learning experiences aligned with Arizona Early Learning Standards; refining observation and evaluation skills; adapting curriculum to children's abilities and interests; practicing effective interactions and child guidance techniques; and evaluating the components of quality early childhood education programs. Approval of the Early Childhood Practicum Application along with evidence of successful completion of the standard security and safety specifications are required prior to enrollment in ECE 291.

Prerequisites: ECE 200, ECE 202, ECE 222, ECE 230 (may be taken concurrently), ECE/PSY 234, ECE 270, and ECE 280

Credits: 4

Lecture: 1

Lab: 9

ECE 296 - Internship: Early Childhood Education

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

ECE 298 - Special Topics: Early Childhood Education

Description: Introduction to special topics in Early Childhood Education.

Credits: 1
Lecture: 1
Lab: 0

ECE 299 - Independent Study Early Childhood Education

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Economics

ECN 110 - Economics of Sports

Description: Application of economic theories to various aspects of professional and collegiate sports. Topics covered include the economic impact of sports to a local community, wage discrimination, the economics of publicly and privately funded stadiums, alumni giving, academics, broadcasting, and building a fan base.

General Education Competency: Diversity

Credits: 3
Lecture: 3
Lab: 0

ECN 232 - Business Statistical Analysis

Description: Survey of standard tools of statistical analysis. Topics include descriptive measures, probability, discrete probability distributions, continuous probability distributions, confidence intervals, hypothesis testing, and regression analysis.

Prerequisites: MAT 141 or higher, or a satisfactory score on the mathematics skills assessment.

Credits: 3
Lecture: 3
Lab: 0

ECN 235 - Principles of Economics-Macro

Description: An analysis of the national economy. Topics include macroeconomics problems, policy, standard analyses, international economics, and current thought.

General Education Competency: Quantitative Literacy

Credits: 3
Lecture: 3
Lab: 0

ECN 236 - Principles of Economics-Micro

Description: An analysis of markets. Topics include consumer choice, demand and supply, analyses of market structures, market failures, and current thought.

Credits: 3

Lecture: 3

Lab: 0

ECN 296 - Internship: Economics

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Credits: 3

Lecture: Varies

Lab: Varies

ECN 299 - Independent Study Economics

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Education

EDU 180 - Educational Technology: Teaching and Learning in a Digital Age

Description: Introduction to the rapidly changing nature of computer technology and information systems in teaching and learning and its practical and ethical impact on social, organizational, personal and ethical issues. Exploration of new and emerging education technologies as well as the history of technology integration. Includes the digital divide and its impact on ethnicity and race pertaining to school equality and technology innovation.

Credits: 3

Lecture: 3

Lab: 0

EDU 200 - Introduction to Education

Description: Overview of education profession and U.S. educational system; historical development and foundations of education and educational institutions. Includes theories of teaching, the students as learner, current issues and trends in education, the school and community, and roles and responsibilities of the teacher. Includes a field and observation practicum. This course requires 10 face-to-face observation hours in a k-12 setting.

Credits: 3

Lecture: 3

Lab: 0

EDU 210 - Cultural Diversity in Education

Description: Prepares potential teachers to examine how race, ethnicity, and cultural differences influence students' experiences in school. Assists teachers in implementing a multicultural approach to teaching by fostering critical thinking and identifying effective teaching styles and practices for a diverse student population. This course requires 10 face-to-face observation hours in a k-12 setting.

Prerequisites: Reading Proficiency

Credits: 3

Lecture: 3

Lab: 0

EDU 222 - Introduction to the Exceptional Learner

Description: Overview of various types of learners with special needs including children with disabilities, gifted learners, and children at risk birth to grade 12. Includes topics on public laws related to individuals with disabilities, identification and assessment of children, characteristics of exceptional learners, inclusion, coordinating with various agencies and specialists, and planning, delivering, and documenting educational services. This course requires 10 face-to-face observation hours in a special needs or full inclusion setting. This course is cross-listed with ECE 222 .

Credits: 3

Lecture: 3

Lab: 0

EDU 230 - Language and Literacy Experiences

Description: Language and literacy processes and the way in which literature enriches a child's development. Review of children's literature and methods of enhancing literacy experiences. This course is cross-listed with ECE 230.

Credits: 3

Lecture: 3

Lab: 0

EDU 239 - Structured English Immersion Provisional Endorsement

Description: Prepares certified teachers and administrators who were trained in states other than Arizona or were certified after August 2006 to meet the academic needs of English Language Learner populations and qualifies them for the Provisional SEI Endorsement as required by the Arizona Department of Education.

Credits: 3

Lecture: 3

Lab: 0

EDU 240 - Family and Community Partnerships

Description: School and family relationships with a focus on communication, ethics, professionalism and problem-solving. Impact of the community, its resources and referral systems. Emphasis on families, diversity, multicultural issues and parent involvement. This course is cross-listed with ECE 240.

Credits: 3

Lecture: 3

Lab: 0

EDU 242 - The Science of Reading and Structured Literacy Instruction in the K-5 Classroom

Description: Provides preservice and K-5 educators with understanding of the research and evidence known as The Science of Reading and how this body of work guides effective and efficient literacy instruction. Exploration into what the research based teaching strategies that promote phonological awareness, phonics, fluency, vocabulary, and comprehension using a systematic, explicit, prescriptive, and multisensory approach so that teachers have the literacy knowledge and understanding needed to ensure all children can learn to read successfully.

This course fulfills the requirements for the Science of Reading and phonics instruction component (45 clock hours/3 credits) of ADE's K-5 Literacy Endorsement certification.

Credits: 3

Lecture: 3

Lab: 0

EDU 243 - Reading Instruction & Intervention

Description: Identification of dyslexia symptoms through screening and evaluation tools as determined by the Arizona Department of Education. Ongoing diagnostic and classroom-based instructional assessments that screen for indicators of dyslexia, including phonological awareness, rapid naming skills, letter/sound correspondence, nonsense word fluency, and symbol recognition. Effective interventions and teaching strategies that address the needs of students with dyslexia. Utilization of the International Dyslexia Association Knowledge and Practice Standards for Teachers of Reading. Arizona Department of Education Certificate requirement for K-3 teachers and K-5 teachers of reading. Preparation for Foundations of Reading exam.

Credits: 3

Lecture: 3

Lab: 0

EDU 296 - Internship: Education

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

EDU 299 - Independent Study Education

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Engineering

EGR 102 - Introduction to Engineering

Description: Introduction to the field of engineering. Emphasizes the integration of teamwork, problem solving, and verbal communication skills into a design project.

Prerequisites: MAT 187 or (MAT 182 and MAT 183). Reading Proficiency.

Credits: 3

Lecture: 2

Lab: 2

EGR 110 - Introduction to Digital Design

Description: Introduction to logic circuits and digital subsystems using individual components, MSI and LSI circuits, and design of state machines. Includes number systems, logic gates, combinational logic, simplification techniques, encoders, decoders, flip-flops, counters, registers, memory, digital-to-analog and analog-to-digital converters, programmable logic devices (PLDs) and hardware description language (HDL).

Prerequisites: Reading Proficiency. MAT 187 (or MAT 182 and MAT 183) (may be taken concurrently)

Credits: 4

Lecture: 3

Lab: 2

EGR 180 - CAD (Computer Aided-Drawing) with SolidWorks

Description: Fundamentals of graphical communications, including sketching, computer-aided drafting, design, and parametric modeling.

Credits: 3

Lecture: 2

Lab: 2

EGR 210 - Introduction to Electrical Engineering

Description: Introduces electrical engineering fundamentals including DC and AC circuit analysis, operational amplifiers, transformers, and AC power. Also introduces electrical lab equipment, electrical circuit simulation, construction and testing.

Prerequisites: Reading Proficiency. MAT 221 (may be taken concurrently)

Credits: 4

Lecture: 3

Lab: 2

EGR 299 - Independent Study Engineering

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Electronics Technology

ELT 101 - Basic Electricity

Description: Basic principles of Alternating Current (AC) and Direct Current (DC) electricity. Examination of the structures and functions of AC and DC circuits including series, parallel and series-parallel circuits. Includes an overview of electric systems.

Credits: 4

Lecture: 3

Lab: 2

ELT 102 - Power Electronic Fundamentals

Description: A survey of electronics fundamentals to include active device circuits, power supplies, sensors and variable frequency drives.

Prerequisites: ELT 101

Credits: 3

Lecture: 2

Lab: 2

ELT 111 - DC Electrical Systems

Description: Utilize the principles of direct current (DC) electricity and electronic test equipment to analyze, troubleshoot and repair DC electrical circuits.

Credits: 3

Lecture: 2

Lab: 2

ELT 112 - AC Electrical Systems

Description: Utilize the principles of alternating current (AC) electricity and electronic test equipment to analyze, troubleshoot and repair AC electrical circuits.

Prerequisites: ELT 111 (may be taken concurrently)

Credits: 3

Lecture: 2

Lab: 2

ELT 115 - Conduits and Raceways

Description: Layout, bending and assembly of conduit systems.

Credits: 1

Lecture: .5

Lab: 1

ELT 126 - Solid State Devices

Description: Characteristics and operation of solid state devices including diodes, thyristors, bipolar and field effect transistors. Includes power supplies, diode circuits, transistor biasing and operation, triacs, and silicon-controlled rectifiers.

Prerequisites: ELT 111 and ELT 112

Credits: 3

Lecture: 2

Lab: 2

ELT 130 - Introduction to Robotics

Description: Fundamental concepts of robotics including how robots move, sense, and perceive the world around them. Hands-on operation and programming of robots.

Credits: 3

Lecture: 2

Lab: 2

ELT 135 - Robot Operator

Description: Fundamentals of robot operation and maintenance including robot movement, robot sensing, decision-making with I/O devices, and tooling. Provides the opportunity to certify as FANUC HandlingTool Operator/Programmers and Universal Robots Operators.

Credits: 3

Lecture: 2

Lab: 2

ELT 140 - Robot Vision

Description: Basic tasks and procedures required for an operator, technician, engineer or programmer to set up, teach, test, and modify GE FANUC iRVision applications on an R-30iA Robot Controller.

Prerequisites: ELT 130

Credits: 3

Lecture: 2

Lab: 2

ELT 141 - Electrical Apparatus

Description: Overview of transformers and their operation including single and three-phase theory. Focus is on construction and hook-up of single-phase, three-phase, open Y and Delta transformer connections. Covers capacitor banks, including application and installation.

Prerequisites: ELT 101 (may be taken concurrently) or ELT 112 (may be taken concurrently)

Credits: 4

Lecture: 2

Lab: 4

ELT 162 - Microprocessors & Microcontrollers

Description: An introduction to microprocessor and microcontroller architecture and programming. Topics include, memory, instruction sets, addressing modes, serial/parallel interfacing, and troubleshooting. Real-time applications are studied and verified on protoboards and actual microprocessors.

Prerequisites: ELT 183

Credits: 2

Lecture: 1

Lab: 2

ELT 165 - Programmable Logic Controllers

Description: Introduction to programmable logic controller (PLC) architecture and programming. Topics include, memory, instruction sets, addressing modes, serial/parallel interfacing, relay/ladder logic, and troubleshooting. Real-time applications are studied and verified on protoboards and actual PLCs.

Prerequisites: ELT 101 or ELT 111

Credits: 2

Lecture: 1

Lab: 2

ELT 183 - Digital Circuits

Description: Introduction to logic circuits used in computers and other digital equipment. Includes number systems, logic gates, combinational logic, simplification techniques, encoders, decoders, flip-flops, counters, registers, memory, digital-to-analog and analog-to-digital converters, programmable logic devices (PLDs) and hardware description language (HDL).

Credits: 3

Lecture: 2

Lab: 2

ELT 198 - Electronics Topics:

Description: Exploration of electronics, instrumentation or process control topics outside of our standard curriculum.

Credits: 1-3

Lecture: Varies

Lab: Varies

ELT 220 - National Electrical Codes

Description: Prepares students to use NEC as a guide for the safe installation of electrical equipment in a residential setting. Emphasizes charts, rulings, wire methods, and state and local regulations. Includes applying appropriate code to all aspects of electrical installation.

Credits: 3

Lecture: 2

Lab: 2

ELT 221 - Communication Systems and Circuits

Description: Theory and principles of modern electronic communication systems. Topics include: electromagnetism, functional blocks of communications systems, amplitude modulation (AM) transmission and reception, superheterodyne receivers, systems for frequency synthesis, frequency modulation (FM) transmission and reception, transmission lines, antennas and wave propagation, and fiber optics. Emphasis on analysis and troubleshooting of electronic communication systems and circuits to the component level.

Prerequisites: ELT 126 and ELT 162

Credits: 3

Lecture: 2

Lab: 2

ELT 258 - Electronic Troubleshooting

Description: Problem solving techniques and methodology using foundational concepts of DC, AC, solid state devices and digital circuits. Emphasis on troubleshooting utilizing analog and digital test equipment to identify faults in a variety of nonfunctional circuits and equipment. Capstone course of the Electrical & Instrumentation Technology degree program and Electronics Technology certificate programs.

Prerequisites: ELT 126 and ELT 162

Credits: 2
Lecture: 0
Lab: 4

ELT 271 - Process Control Instrumentation

Description: Instrumentation associated with industrial process control, including measurements of pressure, force, weight, motion, flow, level, and temperature; analytical measurement and procedures for safety, calibration and testing.

Prerequisites: ELT 126

Credits: 3
Lecture: 2
Lab: 2

ELT 272 - Motors and Motor Controls

Description: Characteristics, performance and control of rotating electrical machinery, transformers and associated equipment.

Prerequisites: ELT 126.

Credits: 3
Lecture: 2
Lab: 2

ELT 279 - Tools for Electronic Troubleshooting

Description: Tools for diagnostic and troubleshooting including technical reference research, technical documentation, diagnostic histories, test equipment, and proper maintenance and calibration techniques of test equipment. Additional practice using standard and specialty electronic test equipment.

Prerequisites: ELT 221 (may be taken concurrently) or Instructor permission.

Credits: 2
Lecture: 0
Lab: 4

ELT 295 - Apprenticeship: Electrical Instrumentation

Description: Supervised field experience in electrical and instrumentation, motor control and/or process control.

Prerequisites: Program Admission.

Credits: 3
Lecture: Varies
Lab: Varies

ELT 296 - Internship: Electrical Technician

Description: Supervised field experience with businesses, corporations, government agencies, schools or community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

ELT 299 - Independent Study Electronics Technology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Emergency Medical Services

EMS 120 - Basic First Aid, CPR and AED

Description: First Aid for victims of all ages. Includes basic recognition and care of medical and trauma patients. Awareness of environmental emergencies including bites, stings, and exposure to hot and cold. Cardiopulmonary resuscitation (CPR) and Automated External Defibrillator (AED) use. Meets the requirements of Heartsaver First Aid by the American Heart Association.

Credits: .5

Lecture: .5

Lab: 0

EMS 123 - Cardiopulmonary Resuscitation for the Health Care Provider

Description: CPR for victims of all ages. Includes ventilation with a barrier device, a bag-valve-mask device and oxygen, and use of an Automated External Defibrillator (AED). Meets the requirements of Healthcare Provider CPR & AED by the American Heart Association.

Credits: .5

Lecture: .5

Lab: 0

EMS 126 - Wilderness First Responder

Description: Principles and skills to make critical medical and evacuation decisions and take appropriate action in remote locations where advanced medical assistance is more than one hour away.

Credits: 3

Lecture: 3

Lab: 0

EMS 143 - Emergency Medical Technician Practicum

Description: Designed to provide hospital, clinical, and field experiences for EMT students. Students will observe emergency department operations for a period sufficient to gain an appreciation for the continuum of care. During these experiences, students must demonstrate competency in patient assessments as outlined by the program. These experiences will be performed in an emergency department, ambulance, clinic, nursing home, doctor's office, etc. or on standardized patients in a simulation education setting. The student must participate in and document patient contacts in a field experience approved by the medical director and program director. Upon successful completion of EMS 143, EMS 144, and EMS 144L, students will synthesize EMT standard of care and scope of practice, allowing the program to submit their name to sit for the exam required to become an NREMT certified EMT.

Corequisites: EMS 144 and EMS 144L

Credits: 2

Lecture: 0

Lab: 4

EMS 144 - Emergency Medical Technician

Description: Preparation for employment as competent entry-level Emergency Medical Technicians (EMTs). Introductory survey of emergency medical services, including but not limited to preparatory, airway and double lumen device, patient assessment, medical behavioral emergencies, obstetrics and gynecology, trauma, pediatrics and infants, geriatrics, and operations. Upon successful completion of EMS 143, EMS 144, and EMS 144L with a grade of "C" or better, the program will submit the student's name to take the National Registry of EMT certification examination for EMT.

Corequisites: EMS 143 and EMS 144L

Credits: 10

Lecture: 10

Lab: 0

EMS 144L - Emergency Medical Technician Lab

Description: Practical application of the didactic instruction received in EMS 144 to include: medical, legal and ethical aspects; techniques of CPR, AED, extrication, management of trauma and medical emergencies; and the administration of appropriate medical care. Discussion and application of basic computer skills in the health care industry are also covered.

Corequisites: EMS 143 and EMS 144

Credits: 4

Lecture: 0

Lab: 8

EMS 162 - Introduction to Pharmacology for EMS Professionals

Description: Overview of the principles of pharmacology and pharmacologic agents utilized in patient management plans. Includes pharmacokinetics, pharmacodynamics, physiology of pharmacology, calculating drug dosages, and drug profiles. A-F grading only.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

EMS 164 - ECG Rhythm Analysis & Interpretation for EMS Professionals

Description: Overview of the anatomy and physiology of the cardiovascular system and electrophysiology of the cardiac conduction system for Emergency Medical Service professionals. Basic electrocardiograph (ECG) multi-lead acquisition, analysis, and interpretation of various dysrhythmias and cardiovascular conditions. A-F grading only.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

EMS 201 - Advanced Cardiac Life Support Initial Provider in Paramedicine

Description: Provides the knowledge and skills needed to recognize and manage cardiopulmonary arrest, acute dysrhythmia, stroke, and acute coronary syndromes according to current emergency cardiovascular care guidelines. Integrates knowledge of basic electrocardiographic rhythm interpretation, pharmacologic agents, and other interventions used in advanced cardiac life support. A-F grading only.

Prerequisites: Program Admission.

Credits: 1

Lecture: 1

Lab: 0

EMS 202 - Pediatric Advanced Life Support Initial Provider in Paramedicine

Description: Provides the knowledge and skills needed to recognize and manage an infant, child, or adolescent in respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current Pediatric Advanced Life Support and emergency cardiovascular care guidelines. Integrates knowledge of basic electrocardiographic rhythm interpretation, pharmacologic agents and other interventions used in pediatric emergencies. A-F grading only.

Prerequisites: Program Admission.

Credits: 1

Lecture: 1

Lab: 0

EMS 203 - Pre-hospital Trauma Life Support

Description: Designed to provide the knowledge and skills needed to recognize and manage various trauma conditions and environmental injuries according to the International Trauma Life Support provider/ Prehospital Trauma Life Support guidelines. A-F grading only.

Prerequisites: Program Admission.

Credits: 1

Lecture: 1

Lab: 0

EMS 211 - Emergency Medical Technician Refresher

Description: New techniques and review of principles in client care, basic life support and transportation of sick and injured. Meets Arizona Department of Health Services refresher training requirements.

Corequisites: On the first day of class, the student will need to submit one of the following:

- a. Current certification from the DHS as an EMT or higher EMCT classification, or
- b. Documentation of completion of prior training in an EMT course within the past two (2) years, or
- c. Documentation of current National Registry of EMTs at the EMT or higher EMCT classification, or
- d. Documentation from National Registry of EMTs requiring the student to complete the EMT refresher course to be eligible for registration in the National Registry of EMTs,

AND

Documentation of current certification in adult, pediatric, and infant cardiopulmonary resuscitation through instruction consistent with American Heart Association recommendations for emergency cardiovascular care by EMCTs. This would include applicable courses from the following associations: American Heart Association (AHA), American Red Cross (ARC), National Safety Council (NSC), Medic First Aid (MFA), American Health and Safety (ASHI) and the Military Training Network (MTN).

Credits: 2

Lecture: 2

Lab: 0

EMS 239 - Airway and Ventilatory Management in Paramedicine

Description: Designed to prepare students to integrate the knowledge of the respiratory system, comprehensive assessment practices, and pharmacologic agents to formulate a differential diagnosis and implement airway and ventilatory management plans for medical emergencies and trauma. Prepares students to perform comprehensive assessments and techniques in the paramedic scope of practice for assuring airway patency, adequate mechanical ventilation, and respiration for all age groups. A-F grading only.

Prerequisites: Program Admission.

Credits: 2

Lecture: 2

Lab: 0

EMS 252 - Pharmacology in Paramedicine

Description: Provides an overview of the pathophysiologic principles of pharmacology, pharmacologic agents in the paramedic scope of practice, and the practice of medication administration. Prepares students to integrate comprehensive knowledge of the pathophysiologic principles of pharmacology and pharmacologic agents to formulate a differential diagnosis and to implement a management plan for medical emergencies and trauma. A-F grading only.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

EMS 254 - Paramedic Practicum I

Description: Precepted paramedicine practicum in which the student synthesizes standard of care and scope of practice with a comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behaviors, critical thinking, decision making, and patient management of medical emergencies and trauma in a clinical setting. A-F grading only.

Prerequisites: Program Admission.

Credits: 1

Lecture: 0

Lab: 2

EMS 257 - ALS: Paramedic Refresher

Description: The Advanced Life Support (ALS): Paramedic Refresher course is structured to deliver a comprehensive review and practical update on essential paramedic skills and knowledge. The ALS: Paramedic Refresher course is meticulously aligned with national recertification requirements and state/local guidelines, incorporating up-to-date, evidence-based practices to reinforce proficiency and prepare paramedics for the demands of the prehospital environment.

Prerequisites: Program Director approval.

Credits: 3

Lecture: 2

Lab: 2

EMS 265 - Paramedic Practicum II

Description: Precepted paramedic practicum in which the student synthesizes standard of care and scope of practice with comprehensive assessment and diagnostic technology, patient advocacy, ethical and professional behavior, critical thinking and decision making, and patient management of medical emergencies and trauma in the out-of-hospital setting. A-F grading only.

Prerequisites: Program Admission.

Credits: 1

Lecture: 0

Lab: 2

EMS 267 - Technical Operations in Paramedicine

Description: Overview of emergency medical service systems, safety and wellness, resiliency, health, medical/legal and ethical issues, EMS communications, documentation, and crime scene awareness. Examines the paramedic's role and responsibility to assure personal, patient, and public health and safety in the provision of professional emergency care. A-F grading only.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

EMS 269 - Trauma Patient Management in Paramedicine

Description: Provides an overview of transport operations, incident management, multi casualty incidents, extraction, special rescue, hazardous material incidents, terrorism incidents, and disaster response. Provide an overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for various trauma conditions. Prepares students to implement a management plan in the paramedic scope of practice for hemorrhage, soft tissue trauma, burns, face and neck trauma, head and spine trauma, chest trauma, abdominal and genitourinary trauma, orthopedic trauma, and environmental emergencies. A-F grading only.

Prerequisites: Program Admission.

Credits: 2

Lecture: 2

Lab: 0

EMS 271 - Medical Emergencies in Paramedicine I

Description: Designed to provide an overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for respiratory and cardiovascular emergencies. Prepares students to implement a management plan in the Paramedic Scope of Practice for respiratory and cardiovascular emergencies. A-F grading only.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

EMS 271L - Medical Emergencies in Paramedicine Lab

Description: Develops psychomotor skills in the Paramedic Scope of Practice through sequenced lab simulations. Prepares students to implement a management plan in the Paramedic Scope of Practice for respiratory and cardiovascular emergencies. A-F grading only.

Prerequisites: Program Admission.

Credits: 2
Lecture: 0
Lab: 4

EMS 272 - Medical Emergencies in Paramedicine II

Description: An overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for various medical emergencies. Prepares students to implement a management plan in the Paramedic Scope of Practice for various medical emergencies, specifically for gynecologic, obstetric, pediatric, and neonatal care. A-F grading only.

Prerequisites: Program Admission.

Credits: 3
Lecture: 3
Lab: 0

EMS 272L - Comprehensive Patient Assessment in Paramedicine I

Description: An overview of comprehensive patient assessment. Develops psychomotor skills in the Paramedic Scope of Practice through sequenced lab simulations. Integrates the pathophysiological significance of comprehensive assessment findings to formulate a differential diagnosis and implement a management plan for medical emergencies and trauma. A-F grading only.

Prerequisites: Program Admission.

Credits: 4
Lecture: 1
Lab: 6

EMS 273 - Medical Emergencies in Paramedicine III

Description: Provides an overview of pathophysiologic principles, epidemiology, comprehensive assessment, differential diagnosis, and pharmacology for various medical emergencies. Implement a management plan in the Paramedic Scope of Practice for various medical emergencies, including geriatric emergencies and patients with special challenges. A-F grading only.

Prerequisites: Program Admission.

Credits: 4
Lecture: 4
Lab: 0

EMS 273L - Comprehensive Patient Assessment in Paramedicine II

Description: Overview of comprehensive patient assessment. Develops psychomotor skills in the Paramedic Scope of Practice through sequenced lab simulations. Integrates the pathophysiological significance of comprehensive assessment findings to formulate a differential diagnosis and implement a management plan for medical emergencies and trauma. A-F grading only.

Prerequisites: Program Admission.

Credits: 4

Lecture: 1

Lab: 6

EMS 290 - Pediatric Emergencies Prehospital Professionals Initial Provider

Description: The knowledge and skills needed to recognize and manage an infant, child, or adolescent in respiratory compromise, circulatory compromise, or cardiopulmonary arrest according to current pediatric emergencies for prehospital professionals and emergency cardiovascular care guidelines. Integrates knowledge of basic electrocardiographic rhythm interpretation, pharmacologic agents, and other interventions used in pediatric emergencies.

Prerequisites: Program Admission.

Credits: 2

Lecture: 2

Lab: 0

EMS 292 - Critical Care Paramedicine

Description: Capstone critical care paramedicine experience to facilitate the synthesis of standard of care and expanded scope of practice with comprehensive assessment, diagnostic technology, patient advocacy, and ethical and professional behaviors. Includes practice in patient-centered evidence-based paramedicine in the clinical, out of hospital, and interfacility transport settings.

Prerequisites: Program Admission.

Credits: 8

Lecture: 8

Lab: 0

EMS 294 - Community Health Paramedicine

Description: Community health paramedicine experience allowing the synthesis of standard of care and expanded scope of practice with comprehensive assessment, diagnostic technology, patient advocacy, and ethical and professional behaviors. Includes practice in patient-centered evidence-based paramedicine in the community setting.

Prerequisites: Program Admission.

Credits: 4

Lecture: 4

Lab: 0

EMS 296 - Internship: Emergency Medical Services

Description: Supervised field experience with healthcare facilities, EMS and fire-based EMS agencies, schools, and community organizations to expand career interests and apply subject knowledge relevant to the profession.

Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Students must have completed specific program requirements as required by the Director of EMS and have approval from the Director of EMS to register for the course.

Credits: 3

Lecture: Varies

Lab: Varies

EMS 298 - Tactical Emergency Casualty Care

Description: Strategies, skills, and simulations to decrease preventable death in the unstable prehospital environment according to National Association of EMTs (NAEMT) and Tactical Emergency Casualty Care (TECC) guidelines. Strategies include cintegration of rapid patient assessment with trauma patient management in tactical and hazardous environments. Promotes a common approach for the transition of rescue to patient care while limiting the risk of further casualties. Examines the impact of tactical and environmental factors on trauma patient management.

Prerequisites: Program Admission.

Credits: 2

Lecture: 2

Lab: 0

EMS 299 - Independent Study Emergency Medical Services

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

English

ENG 085 - College Literacy Skills

Description: Introduction to college-level reading skills with emphasis on developing vocabulary, using adaptive reading strategies, recognizing organizational patterns, identifying main ideas and supporting details, and analyzing for comprehension.

Prerequisites: Satisfactory score on the reading skills assessment.

Credits: 4

Lecture: 4

Lab: 0

ENG 095 - Fundamental Skills for College Composition

Description: Fundamental skills for reading and writing in college. Introduction to college-level reading skills will emphasize developing vocabulary, using adaptive reading strategies, recognizing organizational patterns, identifying main ideas and supporting details, and analyzing for comprehension. Includes an introduction to basic sentence, paragraph and essay writing skills required for success in college.

Prerequisites: Satisfactory score on the skills assessment or placement using Multiple Measures chart.

Credits: 4

Lecture: 4

Lab: 0

ENG 100 - Introductory Composition

Description: Introduction to basic writing, reading and research skills required for success in college.

Prerequisites: Satisfactory score on the skills assessment. ENG 085 (may be taken concurrently). Reading Proficiency.

Credits: 3

Lecture: 3

Lab: 0

ENG 101 - College Composition I

Description: Composing expository and argumentative essays for specific audiences. Emphasis on the processes of writing, reading and critical thinking. Introduction to research and documentation.

Prerequisites: Satisfactory score on the English skills assessment. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 101A - College Composition I with Writing Skills Review

Description: Composing expository and argumentative essays for specific audiences. Emphasis on the processes of writing, reading and critical thinking. Introduction to research and documentation. Development of active reading skills. Intensive review of essay form and conventions of standard written English.

Prerequisites: ENG 095 or satisfactory score on the skills assessment or placement using Multiple Measures chart. Reading Proficiency.

General Education Competency: Written Communication

Credits: 4

Lecture: 4

Lab: 0

ENG 102 - College Composition II

Description: Extensive critical reading and writing about texts. Emphasis on fluency in critical writing. Includes research skills and writing a critical, documented essay.

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 103 - College Composition I Honors

Description: Composing expository and argumentative essays for specific audiences. Emphasis on the processes of writing, reading, and critical thinking. Advanced ENG 101 content and learning activities. Introduction to research and documentation.

Prerequisites: Placement by English skills assessment. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 104 - College Composition II Honors

Description: Extensive critical reading and writing about texts, including literature. Emphasis on fluency in critical writing. Advanced ENG 102 content and learning activities. Includes research skills and writing a critical, documented essay.

Prerequisites: ENG 103, or ENG 101 and placement by English skills assessment. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 136 - Professional Writing in the Workplace

Description: Practical writing for the world of work. Includes business correspondence to technical reports. Analyze and create written digital products. Focus on understanding the audience for effective communication.

Prerequisites: Satisfactory score on the English skills assessment or ENG 095.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 139 - Introduction to Creative Writing

Description: Techniques in writing, evaluating, and critiquing poetry, fiction and creative non-fiction. Includes writing a documented analysis.

Prerequisites: ENG 095 or satisfactory score on the English skill assessment. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 185 - Sports in Literature and Media

Description: Explores how sports are and have been represented and expressed in media and literature, including fiction, nonfiction, poetry, and plays. Investigates the ways in which narrative representation engages changing cultural and historical contexts. Focus is on analysis of gender, race, and socioeconomics, along with philosophy, ethics, psychology, and politics in sports literature and media.

General Education Competency: Written Communication; Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

ENG 198 - Creative Writing Workshop:

Description: Exploration of a creative writing component.

Credits: 1

Lecture: 1

Lab: 0

ENG 210 - Introduction to Rhetoric

Description: Study of important works concerning theories of invention, arrangement, style, and delivery. Includes development of the written voice to enhance all aspects of communication to carry out work and persuasion. Also includes the application of rhetorical theories to a variety of material, print, and digital forms of communication.

Prerequisites: ENG 101 or ENG 101A or ENG 103

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

ENG 211 - British Literature: Beginning to 18th Century

Description: Exploration of major artistic, historical, cultural, philosophical, gender, and genre issues represented in selected works from Medieval, Renaissance, 17th and 18th century British literature.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

ENG 212 - British Literature 1798 to Present

Description: Exploration of major artistic, historical, cultural, philosophical, gender, and genre issues represented in selected works of British literature from 1798 to the present.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

ENG 217 - Major Issues in World Literature

Description: Investigation of major artistic, historical, ethnic, race, gender and philosophical issues in representative works of great literature.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

ENG 220 - Introduction to Language and Culture

Description: Introduction to the study of language with a particular focus on American Englishes, including the history of American English. Focus is on cultural influence on language across the US and how the use of language is associated with power. Study of the basic building blocks of language. Study of variations of language across cultures and contexts, including contemporary and historical spoken, written, and digital registers and genres of American English. Examination of the effects of technology, culture, and context on language.

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3
Lecture: 3
Lab: 0

ENG 230 - Introduction to Literature

Description: Introduction to close reading and writing about a variety of works of literature from different genres.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3
Lecture: 3
Lab: 0

ENG 236 - Advanced Professional Writing in the Workplace

Description: Practical writing for the world of work. Includes business correspondence to technical reports. Analyze and create written digital products. Focus on understanding the audience for effective communication. Extensive critical reading and writing about workplace texts. Emphasis on fluency in critical writing. Includes research skills and writing a critical, documented report.

Prerequisites: ENG 101 or ENG 101A or ENG 103 or ENG 136. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3
Lecture: 3
Lab: 0

ENG 237 - Women in Literature

Description: Survey of women in literature from ancient Greece to present with emphasis on images of female protagonists as portrayed by male and female authors.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3
Lecture: 3
Lab: 0

ENG 240 - American Literature to 1865

Description: Exploration of major artistic, historical, philosophical, cultural and gender issues represented in selected works from the Colonial era to the Civil War

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

ENG 241 - American Literature 1865 to Present

Description: Exploration of major artistic, historical, philosophical, cultural and gender issues represented in selected works from the Civil War to the present.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

ENG 242 - Introduction to Shakespeare

Description: Survey of selected works of William Shakespeare's literature from multiple genres of plays, poems, and sonnets.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

ENG 245 - Ethnic Literature of the Southwest

Description: Examination of literature by a variety of ethnic groups in the American Southwest across multiple genres, time periods, and geographic regions. This will include Indigenous literature and Chicano/a literature.

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 249 - Topics in Creative Writing:

Description: Analysis, writing, and revision of element within fiction, poetry, or creative nonfiction.

Credits: 3

Lecture: 3

Lab: 0

ENG 270 - Introduction to Fiction Writing

Description: Introduction to techniques for reading and writing long form and short form fiction.

Prerequisites: Reading Proficiency. ENG 101 (may be taken concurrently)

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 271 - Introduction to Poetry

Description: Introduction to reading and writing poetry across multiple cultures and time periods.

Prerequisites: Reading Proficiency. ENG 101 (may be taken concurrently).

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 272 - Introduction to Creative Nonfiction

Description: Introduction to creative nonfiction as a genre of writing, including techniques for reading, analyzing, and writing creative nonfiction which may include memoir, personal essay, travel or nature writing, journalistic writing, and other types of writing as determined by the instructor.

Prerequisites: Reading Proficiency. ENG 101 (may be taken concurrently)

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

ENG 296 - Internship: English

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies
Lab: Varies

ENG 299 - Independent Study English

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Entrepreneur's Institute

ENT 210 - Vision to Business Plan - Entrepreneur's Institute

Description: Focuses on transforming a business vision into a simple, actionable business plan for a new venture. Guides students through creating a complete business plan, including the business description, target market analysis, and basic financial projections. Emphasizes practical application and development of a cohesive and professional document.

Credits: 1
Lecture: 1
Lab: 0

Electric Utility

EUT 101 - Basic Electricity For Lineworkers

Description: Basic principles of Alternating Current (AC) and Direct Current (DC). Examination of the structures and functions of AC/DC circuits including series, parallel and series-parallel circuits and how they are used in the electrical linework industry. Introduces transformer and poly-phase theory and how it applies to distribution systems. Includes grounding circuits, high voltage faults to ground, and linework-specific safety practices.

Credits: 4
Lecture: 3
Lab: 2

EUT 120 - Energy Industry Fundamentals

Description: Commercially used fuels and power sources and their conversion to useable energy, with a focus on generated electrical power and its transmission and distribution to the point of use. Includes exploration of the energy industry, safe and healthy work environments, natural gas transmission and distribution, and career/entry requirements. Preparation for the Energy Industry Fundamentals (EIF) Certification exam.

Credits: 3
Lecture: 3
Lab: 0

EUT 201 - Introduction to Linework I

Description: Overview of the linework industry including its history, technological developments and current practices. Examination of industry equipment and tools. Focus is on safety practices and procedures used in utility linework industry.

Prerequisites: EUT 101 (may be taken concurrently)

Credits: 2

Lecture: 1

Lab: 2

EUT 202 - Field Training I (Lineworker)

Description: Basics of climbing and working on utility poles. Focus is on apparatus and equipment, using ropes and rigging equipment, installations of single and double cross arms, pole framing and setting, use of hand line and building single-phase lines.

Prerequisites: EUT 201 (may be taken concurrently)

Credits: 6

Lecture: 2

Lab: 8

Exercise and Wellness

EXW 100M - Foundations of Mind-Body Exercise

Description: Introduction to the theory, practice, and techniques of mind-body exercise related to personal training and fitness instruction. Exploration of practices and complementary activities that contribute to enhanced body awareness, relaxation response and mental focus. Includes research-supported practice techniques that are associated with health benefits.

Credits: 1

Lecture: 1

Lab: 0

EXW 130H - Weight Management

Description: Weight control through nutrition and exercise. Application of principles of nutrition, and exercise for weight management programming.

Credits: 3

Lecture: 2

Lab: 2

EXW 130J - Weight Loss and Health with Whole Food

Description: Weight loss and health benefits through lifestyle improvements in plant based nutrition with the study of food addiction and recovery.

Credits: 2

Lecture: 2

Lab: 0

EXW 150 - Essentials of Athletic Injury Management and Prevention

Description: Introduction to the essentials of prevention and management of athletic and active related injuries and illnesses. Includes utilizing primary, secondary and focused assessment and recognition of athletic injuries, prevention concepts such as pre-participation exams, protective equipment standards etc. and overall basic athletic injury and illness management.

Credits: 3

Lecture: 2

Lab: 3

EXW 151 - Introduction to Exercise Science and Physical Education

Description: Survey of the disciplines of exercise science, physical education and kinesiology. Includes historical perspective of the integrative nature of the disciplines, the importance of physical activity, qualifications and careers.

Credits: 3

Lecture: 3

Lab: 0

EXW 152 - Personal Health and Wellness

Description: Explore issues related to health and wellness. Emphasis on current topics and individual choices affected by psychological, sociological and environmental factors.

Prerequisites: Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

EXW 153 - First Aid/CPR/AED and Safety

Description: Instruction, theory and practice in first aid/CPR/AED and safety. Upon successful completion, students receive certification from the American Heart Association or American Red Cross.

Credits: 2

Lecture: 1

Lab: 2

EXW 154 - Theory of Coaching

Description: Introduction to the coaching profession with emphasis on the breadth of knowledge, theories and techniques of coaching and their application to achieving objectives in working with athletes.

Credits: 3

Lecture: 3

Lab: 0

EXW 157 - Performance Nutrition

Description: The scientific basis of nutrition, hydration, and physical training principles including processes and patterns that together promote health, sport performance, and rapid recovery. Suitable for students pursuing careers in exercise science and for personal interest.

Credits: 3

Lecture: 3

Lab: 0

EXW 168 - Sport Psychology and Mental Skills

Description: Interaction between psychological variables and performance in sport and physical activity. Emphasis on the coach/teacher role in teaching and assessing mental training skills that influence participation and enhance performance.

Credits: 3

Lecture: 3

Lab: 0

EXW 205 - Stress Management

Description: Examination of the stress process as it relates to health, disease, lifestyle, and the sociocultural environment. Emphasis is on cognitive skills, healthy lifestyle habits and relaxation techniques that may prevent and/or alleviate physical, mental, emotional, social and physiological symptoms of stress. The learning activities of the course are both theoretical and experiential.

Credits: 3

Lecture: 3

Lab: 0

EXW 251 - Integrated and Applied Exercise Science

Description: Study of Exercise Sciences and related topics as they impact exercise. Emphasis on anatomy, physiology, kinesiology, biomechanics, body composition and nutrition. Designed for students preparing to become personal trainers, fitness instructors, coaches or Physical Education majors.

Credits: 3

Lecture: 2

Lab: 3

EXW 252 - ACE Personal Trainer Preparation

Description: Comprehensive system for designing individualized programs based on individual client health, fitness level and goals. Includes methods to facilitate rapport, adherence and self-efficacy in clients as well as design programs to help clients to improve posture, movement, flexibility, balance, core function, cardiorespiratory fitness, and muscular endurance and strength. Preparation for the ACE (American Council on Exercise) Personal Trainer Certificate Exam.

Credits: 3

Lecture: 3

Lab: 0

EXW 299 - Independent Study Exercise and Wellness

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Film and Media Arts

FMA 100 - Animation Principles

Description: Introduction to fundamental principles of animation. Film viewing, basic theory and mechanics of animation, and how those skills apply to specific careers. Emphasis on the fundamentals of character design, storyboarding, and layout through the creation of a short animation project.

Credits: 3

Lecture: 3

Lab: 0

FMA 102 - Production I

Description: Exploration of how film/video images and sound work together to tell a story. Analysis of specific film and scenes from different media, and re-creation of visual and auditory experiences in the studio.

Credits: 3

Lecture: 2

Lab: 2

FMA 103 - Screenwriting I

Description: Writing for the screen across the media: film, television, documentaries, YouTube, commercials and industrial video. Includes marketing the products.

Credits: 3

Lecture: 3

Lab: 0

FMA 104 - Podcasting

Description: Fundamentals of creating a podcast using news reporting, commentary and storytelling. Includes cross marketing with blogs, social media, photography and video.

Credits: 3

Lecture: 3

Lab: 0

FMA 105 - Production II

Description: Skills and techniques for planning location and studio shoots; directing, cinematography and sound capture using digital cameras.

Prerequisites: FMA 102

Credits: 3

Lecture: 2

Lab: 2

FMA 107 - Post-Production I

Description: Post-Production focuses on story structure of thesis through polished film, including sound, music and picture. Post-Production management includes keeping workflow current.

Prerequisites: ART 139/FMA 139 (may be taken concurrently) or FMA 102

Credits: 3

Lecture: 3

Lab: 0

FMA 108 - Social Media Planning and Implementation

Description: Establishment and maintenance of social media channels for professional promotion including YouTube, TikTok and Instagram. Includes both the production of content as well as marketing and business strategies for promoting the channels.

Credits: 3

Lecture: 3

Lab: 0

FMA 110 - Pre-Production

Description: Pre-production for film and media production, including completion of a budget, break down of a script, methods for casting actors, recruiting crew, and procuring locations.

Credits: 3

Lecture: 3

Lab: 0

FMA 113 - Stop Motion Animation

Description: Introduction to fundamental principles of stop motion and experimental animation. Experiments with lighting, staging and camera placement while animating three-dimensional materials shot with a digital camera in real three-dimensional space.

Credits: 3

Lecture: 2

Lab: 2

FMA 116 - The Business of Content Creation

Description: Integration of technical and creative aspects of content creation with practical industry aspects. Includes setting up an independent production company, resume and reel creation. Exploration of film festivals for marketing, networking and supporting materials preparation.

Credits: 3

Lecture: 3

Lab: 0

FMA 117 - Cinematography and Lighting

Description: Field production course exploring cinematic storytelling through camera techniques, lighting styles, sound design and editing for film and media.

Credits: 3

Lecture: 2

Lab: 2

FMA 119 - Sound Design for Media

Description: Foundational principles and techniques of sound design in various media formats. Explores the role of sound in storytelling, focusing on how audio elements such as dialogue, music, sound effects, and ambient noise contribute to the emotional and narrative impact of films, television shows, video games, and other digital media.

Credits: 3

Lecture: 2

Lab: 2

FMA 121 - Screenwriting II

Description: Screenplay writing techniques applied to a range of script projects including short and feature films, industrial video, marketing and TV. Writing practice, including writing dialogue and building structure and characterization, and continuing development of visual language.

Prerequisites: FMA 103

Credits: 3
Lecture: 3
Lab: 0

FMA 131 - Characters, Conflicts and Story

Description: Fundamental elements of writing for on-screen storytelling focused on story structure, and character development.

Credits: 3
Lecture: 3
Lab: 0

FMA 132 - Citizen Journalism

Description: Fundamentals of news reporting through digital media. Includes blogs, social media, photo, video, and podcasts.

Credits: 3
Lecture: 3
Lab: 0

FMA 133 - Introduction to Media and Cinema

Description: Storytelling techniques, aesthetics and social effects of cinema on popular culture in the forms of advertising, marketing, video games, virtual reality and the Internet, (media) and how film and TV are influenced by emerging media.

Credits: 3
Lecture: 3
Lab: 0

FMA 134 - Immersive Transmedia Storytelling

Description: Design a cohesive story experience across traditional and digital delivery platforms - for entertainment, advertising, marketing or social change.

Credits: 3
Lecture: 3
Lab: 0

FMA 135 - Writing for Games and Virtual Reality

Description: Writing for 360° environment created by video games and virtual reality (VR) using story maps and professional screenwriting format with non-linear narrative design. Types of script includes action-adventure, role-playing game (RPG), first-person shooter (FPS) and puzzles.

Prerequisites: FMA 103

Credits: 3
Lecture: 3
Lab: 0

FMA 138 - VFX and Motion Graphics

Description: Industry standard software used to combine filmmaking, video, images, and sound to communicate dynamic 3D titles and visual effects (VFX) and can be applied in a wide range of communication fields inducing commercials, title design, television, social media, games, music videos and websites.

Credits: 3
Lecture: 2
Lab: 2

FMA 139 - Fundamentals of Video Editing

Description: Basic techniques of capturing, editing, and distributing video content. Hands-on application of techniques for digital video, editing vocabulary, and sharing digital video. This course is cross-listed with ART 139

Credits: 3
Lecture: 2
Lab: 3

FMA 150 - History of American Cinema

Description: Survey of American film as an art form, an industry, and a system of representation and communication. Technical, aesthetic, and cultural aspects of cinema and the reading of film as a means for communicating American ideals, values, and attitudes.

Prerequisites: Reading Proficiency.

General Education Competency: Critical Thinking; Diversity

Credits: 3
Lecture: 3
Lab: 0

FMA 161 - Sound Design for Stage and Media

Description: Introduction to the concept and implementation of sound design for different types of theatres (inside, outside, small, large), and different film locations. Topics include how to train one's ears to mix various shows, gain an understanding of signal flow, what speakers sound like, and recalling show practices using an analog mixer. Focus on sound instruments/boards, as well as in-ear technology, and the diverse types of microphones will be included. Cross-listed with THR 161.

Credits: 3
Lecture: 1
Lab: 4

FMA 207 - Post-Production II

Description: Advanced post-production techniques including creative editing, color grading, sound design, and visual effects. Develop workflow management strategies and professional practices.

Prerequisites: FMA 107

Credits: 3

Lecture: 3

Lab: 0

FMA 220 - Advanced Screenwriting

Description: Advanced projects in writing a feature film script. Review of writing techniques, characters, story, conflicts, genres and formats of feature length screenwriting. Application of narrative structure and character development.

Prerequisites: FMA 103 and FMA 121

Credits: 3

Lecture: 3

Lab: 0

FMA 239 - Post-Production Workflow

Description: Focuses on the end-to-end post-production workflow, from media management to final delivery. Management of complex post-production projects covering topics such as media organization, editing workflows, and export settings.

Prerequisites: FMA 139 (may be taken concurrently)

Credits: 1

Lecture: 1

Lab: 0

FMA 296 - Internship: Film and Media Arts

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

FMA 299 - Independent Study Film and Media Arts

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Fire Science

FSC 100 - Principles of Emergency Services

Description: Overview of fire protection and emergency services along with its culture and history; career opportunities; organization and function of public and private fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.

Credits: 3

Lecture: 3

Lab: 0

FSC 102 - Principles of Fire and Emergency Services Safety & Survival

Description: Basic principles and history of the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services.

Credits: 3

Lecture: 3

Lab: 0

FSC 104 - Hazardous Materials First Responder Operations

Description: Introduction to the major categories of hazardous materials. Includes detection, identification, scene management, basic training, equipment planning, strategy and tactics in the management of hazardous materials incidents. Preparation for Arizona Center for Fire Service Excellence certification.

Credits: 3

Lecture: 2

Lab: 3

FSC 105 - Firefighter I & II Certification Academy

Description: Essentials of firefighting including fire department operations, firefighting equipment, and safety. Emphasis on the chemistry of fire, techniques of firefighting, and utilization of equipment in fire suppression. Preparation for State Fire Marshal Fire Fighter I and II certification.

Prerequisites: FSC 104 (may be taken concurrently)

Credits: 12

Lecture: 10

Lab: 6

FSC 135 - Fire Prevention

Description: Topics of fire prevention including: history and philosophy; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation.

Credits: 3

Lecture: 3

Lab: 0

FSC 137 - Fire Protection Hydraulics and Water Supply

Description: Theoretical foundation in the principles of water use for fire protection. Includes application of the laws of hydraulics to analyze and solve water supply problems.

Credits: 3

Lecture: 3

Lab: 0

FSC 155 - Basic Wildland Firefighting

Description: Introduction to wildland fire prevention, including fire behavior, suppression methods, equipment considerations, safety, and incident command. (S- 130/190, I-100, L-180).

Credits: 3

Lecture: 3

Lab: 0

FSC 210 - Advanced Fire Behavior and Combustion

Description: Advanced theories of how and why fires start, spread, and how they are controlled.

Credits: 3

Lecture: 3

Lab: 0

FSC 225 - Legal Aspects of Emergency Services

Description: Federal, state, and local laws that regulate, and national standards that influence, emergency services. Includes standard care, tort, liability and consensus standards as they pertain to emergency services.

Credits: 4

Lecture: 4

Lab: 0

FSC 234 - Fire Investigation

Description: Fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

Credits: 3

Lecture: 3

Lab: 0

FSC 235 - Fire Protection Systems

Description: Design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

Credits: 3

Lecture: 3

Lab: 0

FSC 236 - Occupational Safety and Health for Emergency Services

Description: Basic concepts of occupational health and safety as it relates to emergency service organizations. Includes risk and hazard evaluation and control procedures for emergency service organizations.

Credits: 3

Lecture: 3

Lab: 0

FSC 238 - Strategy and Tactics

Description: Principles of fire ground control through utilization of personnel, equipment, and extinguishing agents.

Credits: 3

Lecture: 3

Lab: 0

FSC 239 - Fire Department Company Officer

Description: Supervisory methods for the fire service in fire safety, fire department organization and personnel supervision. Elements of management for the first-level Company Officer Supervisor. Includes principles of organization, communication, leadership and emergency incident management.

Credits: 3

Lecture: 3

Lab: 0

FSC 240 - Principles of Fire and Emergency Service Administration

Description: Organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

Credits: 3

Lecture: 3

Lab: 0

FSC 241 - Building Construction for Fire Protection

Description: Components of building construction related to firefighter and life safety. Emphasis on the construction and design of structures as key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies.

Credits: 3

Lecture: 3

Lab: 0

FSC 296 - Internship: Fire Science

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

FSC 299 - Independent Study Fire Science

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Geography

GEO 101 - World Geography West

Description: A geographical exploration of the people, places, and landscapes of North America, South America, Europe and Russia.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

GEO 102 - World Geography East

Description: A geographical exploration of the people, places, and landscapes of Africa, Asia and Australia/Pacific Islands.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

GEO 103 - Introduction to Physical Geography

Description: A geographic introduction to the physical processes and landforms of the earth.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

GEO 105 - Introduction to Cultural Geography

Description: A geographical exploration of the human landscape, examining aspects of culture such as language, religion, political organization and economics.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

GEO 212 - Introduction to Meteorology

Description: Physical and chemical conditions that regulate global weather phenomena. Includes structure of the atmosphere, temperature, humidity, air pressure and winds, the development of weather systems, tornadoes and hurricanes, and the parameters that affect local and global climate. Laboratory includes image interpretation, field observation and prediction.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

GEO 296 - Internship: Geography

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

GEO 299 - Independent Study Geography

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Geology

GLG 101 - Introduction to Geology I

Description: Geologic principles emphasizing the structure and composition of the earth, internal and external earth processes and plate tectonics.

Prerequisites: Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

GLG 102 - Introduction to Geology II

Description: Earth's origin and history, including plate tectonics and the consequent movement and distribution of lands and seas through time; basic concepts of age-dating, stratigraphy, and the study of fossils; the geologic time scale and development of life on earth.

Prerequisites: GLG 101 or GLG 110. Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

GLG 110 - Environmental Geology

Description: Introduction to geologic studies and their application to environmental problems, causes and possible solutions. Includes geologic processes, geohazards, and geologic natural resources.

Prerequisites: Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

GLG 296 - Internship: Geology

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

GLG 299 - Independent Study Geology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Gunsmithing

GST 101 - Gunsmithing Fundamentals

Description: Basic gunsmithing skills including shop and general firearms safety, machine tool skills, metal refinishing, rudimentary firearm design and function, rifle firing systems, and bullet ballistics.

Prerequisites: Program Admission.

Credits: 12

Lecture: 5

Lab: 21

GST 151 - Novice Gunsmithing

Description: Basic study of machine tool use and firearms mechanics. Milling, turning, precision grinding, stock making, pistol function and design, and rifle function and design.

Prerequisites: GST 101

Credits: 12

Lecture: 5

Lab: 21

GST 191 - Basic Engraving

Description: Practice in the art of hand engraving. Learn how to take scroll patterns and various designs, transfer them to mild steels, and cut them out by hand. Students will also be taught how to grind and shape cutters and gravers from High speed and carbide blanks, and operate engraving machines and microscopes in the classroom.

Credits: 3

Lecture: 1

Lab: 6

GST 192 - Advanced Engraving

Description: Design advanced intricate scroll designs and patterns, engrave on flat and round cylindrical surfaces, and the engraving of lettering. Emphasis on balance, selecting tools and fixtures, manipulation of the engraver's vise, and all components familiar to the trade.

Prerequisites: GST 191

Credits: 3

Lecture: 1

Lab: 6

GST 195A - Gunsmithing Practicum

Description: Laboratory and extended shop experience for students to develop skills in project planning, drawing and craftsmanship.

Prerequisites: Concurrent enrollment in GST 100 or GST 150

Credits: 2

Lecture: 0

Lab: 6

GST 195B - Gunsmithing Practicum

Description: Laboratory and extended shop experience for students to develop skills in project planning, drawing and craftsmanship.

Prerequisites: Concurrent enrollment in GST 100 or GST 150

Credits: 2

Lecture: 0

Lab: 6

GST 201 - Intermediate Gunsmithing

Description: Intermediate study of machine tool use and firearms mechanics. Studies in the manufacture of rifles, pistols, barrels, actions, and stocks. Design and fabrication of custom parts and tools. Advanced firearm troubleshooting and restoration.

Prerequisites: GST 151

Credits: 12

Lecture: 5

Lab: 21

GST 251 - Advanced Gunsmithing

Description: Capstone course showcasing the previous semesters' learning objectives, coupled with the application of regulatory and business practices.

Prerequisites: GST 151

Credits: 12

Lecture: 5

Lab: 21

GST 270 - Guild Firearms

Description: Assembly and construction of guild quality traditional sporting firearms. Preparation for application to a firearm guild.

Prerequisites: GST 250

Credits: 10

Lecture: 3

Lab: 20

GST 280 - Competition Firearms

Description: Maintenance, assembly and construction of competition firearms.

Prerequisites: GST 250

Credits: 10

Lecture: 3

Lab: 20

GST 291 - Professional Engraving

Description: Design, prep, and engrave a project which can consist of appropriate types of jewelry, knives, belt buckles, firearms, or other pieces that are used in the engraving profession. Individualized instructions will be discussed with each student to assist them with this final project.

Prerequisites: GST 192

Credits: 3

Lecture: 1

Lab: 6

GST 295A - Advanced Gunsmithing Practicum

Description: Advanced gunsmithing laboratory and practice for students concurrently enrolled in one or more of the 200-level gunsmithing courses. Emphasis on development of a project plan, application of tooling and craftsman skills, and use of quality control standards.

Prerequisites: Concurrent enrollment in GST 200 or GST 250

Credits: 2

Lecture: 0

Lab: 6

GST 295B - Advanced Gunsmithing Practicum

Description: Advanced gunsmithing laboratory and practice for students concurrently enrolled in one or more of the 200-level gunsmithing courses. Emphasis on development of a project plan, application of tooling and craftsman skills, and use of quality control standards.

Prerequisites: Concurrent enrollment in GST 200 or GST 250

Credits: 2

Lecture: 0

Lab: 6

GST 296 - Internship: Gunsmithing

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

GST 299 - Independent Study Gunsmithing

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

History

HIS 104 - World History I: Early Civilizations to Globalization

Description: Exploration of the major developments in world history to the eighteenth century. Exploration of the social, intellectual, political, economic, religious, environmental and cultural components that form the core of the modern world.

General Education Competency: Written Communication; Diversity, Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

HIS 105 - World History II: Globalization to the Present

Description: The history of world trade, world empires, and transcontinental migrations from the eighteenth through the twentieth centuries. Examination of the forces of change including industrial, communication and transportation revolutions. The rise of nationalism, militarization and economic globalization.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

HIS 131 - United States History I: Colonization to the Civil War

Description: Survey of social, economic, political, and cultural history from pre-Contact through the Civil War. Emphasis on diverse scholarly interpretations of historical events and evidence. Examination of the continental approach to the development of the United States and the American people and their various contributions to America's shared past.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

HIS 132 - United States History II: Reconstruction to the Present

Description: Survey of social, economic, political and cultural history from 1865 through the 1980s. Exploration of the diversity of the American people. Examination of Racism, Social Reform Movements, and Industrializing America. Emergence of America in global context.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

HIS 296 - Internship: History

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

HIS 299 - Independent Study History

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Humanities

HUM 100 - Gateway to the Humanities

Description: Introduction to disciplines and careers in the Humanities, serving as an entry point for further study and as an introduction to the thinking skills necessary to succeed in college. Exploration of the fundamental issues and questions that span the Humanities, exploring the commonalities and specifics of each discipline, as well as how those fundamental issues relate to modern questions and problems. Includes transfer opportunities for earning a degree in a discipline of the Humanities and careers for humanities majors.

Prerequisites: Reading Proficiency

Credits: 3

Lecture: 3

Lab: 0

HUM 101 - Introduction to Popular Culture

Description: Analyzing and evaluating the relationships among technological innovation, American consumer society, popular culture and ethical questions. Application of critical thinking skills to assess issues, identify influencing factors, and make informed decisions.

Prerequisites: Reading Proficiency

General Education Competency: Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

HUM 202 - Introduction to Mythology

Description: Examination of humanist questions through World mythologies. Issues include: creation of the world, cosmology, fertility/sexuality, human nature, the problem of evil, death, nature of gods/goddesses/God, and the natural world.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

HUM 241 - Humanities I

Description: Cultural history of global civilization from the Neolithic to the Fourteenth Century. Scholarly examination of the great literature, philosophy, music, visual arts, and architecture achievements of human societies.

Prerequisites: Reading Proficiency

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

HUM 242 - Humanities II

Description: Cultural history of global civilizations from the Fifteenth to the Twenty First century. Scholarly examination of the great literature, philosophy, music, visual arts, and architectural achievements of human society.

Prerequisites: Reading Proficiency

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

HUM 243 - World Cinema

Description: Historical and critical survey of the development of world cinema as an art form, as a system of communication, and as an industry from its invention to the present day. How films work technically, aesthetically, and culturally to create, reinforce, challenge, comment on or change social, political or aesthetic norms.

Prerequisites: ENG 101, ENG 101A or ENG 103. Reading Proficiency.

Credits: 3

Lecture: 3

Lab: 0

HUM 248 - Introduction to Folklore

Description: A cross-cultural introduction to the study of folklore. Focuses on the ways individuals and groups use artistic expression in everyday life - including storytelling, beliefs, songs, speech, dance, celebrations and artifacts - to address issues of identity, community, and tradition.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

HUM 296 - Internship: Humanities

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

HUM 299 - Independent Study Humanities

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Heating, Ventilation and Air Conditioning

HVA 100 - Introduction to HVAC I

Description: Basic principles of air conditioning, heating and refrigeration. Examination of the structures and function of cooling and air systems. Focus is on skill development in the areas of soldering, brazing and pipe design.

Credits: 3

Lecture: 2

Lab: 3

HVA 110 - Introduction to HVAC II

Description: Overview of function, design and installation of duct systems, hot water systems and exhaust systems. Focus on maintenance procedures commonly performed in HVAC servicing work.

Credits: 3

Lecture: 2

Lab: 3

HVA 111 - Basic Electricity for HVAC Technicians

Description: Basic principles of electricity necessary to properly assess, install and service the electrical circuits commonly associated with HVAC equipment.

Credits: 3

Lecture: 2

Lab: 3

HVA 112 - EPA Refrigerant Certification Prep

Description: Preparation for the EPA Section 608 Technician Certificate. Review of EPA guidelines for refrigerant recovery and recycling during the installation, service and repair of all HVAC and refrigeration systems. Includes an overview of low GWP refrigerants (A2L and A3 types).

Credits: 3

Lecture: 2

Lab: 3

HVA 215 - Refrigerant Technology I

Description: Introduction to the refrigeration system. Includes taking necessary readings and measurements as well as opportunities to use evacuation, refrigerant recovery and refrigerant charging equipment.

Credits: 3

Lecture: 2

Lab: 3

HVA 220 - HVAC Circuits and Motors

Description: Overview of electrical motors and control circuits. Emphasis on skill development in diagnostic, circuit diagrams and electrical meter application commonly used in the HVAC industry.

Credits: 3
Lecture: 2
Lab: 3

HVA 225 - Heating Technologies I

Description: Overview of heating equipment and service needs. Focus on gas, oil and electrical heating. Fundamentals in installation practices that affect efficiency, performance and equipment life span.

Credits: 3
Lecture: 2
Lab: 3

HVA 230 - HVAC Troubleshooting

Description: Problem-solving techniques and methodology using foundational concepts in refrigerant technology, heating technology and electrical circuits. Emphasis on troubleshooting procedures commonly utilized in the HVAC field.

Credits: 3
Lecture: 2
Lab: 3

HVA 299 - Independent Study Heating, Ventilation, and Air Conditioning

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Imaging Continuing Education

ICE 100 - Computed Tomography Certification

Description: Foundations of computed tomography (CT) scanning principles with respect to patient safety, instrumentation, protocols, scanning parameters, cross-sectional anatomy and pathology.

Prerequisites: Program Admission.

Credits: 3
Lecture: 3
Lab: 0

ICE 110 - Computed Tomography Clinical Education I

Description: Supervised clinical assignments follow a structured approach involving observation, assistance, and the achievement of specific computed tomography competency benchmarks over the course of a semester. These experiences are designed to help students develop essential skills in patient care and computed tomography positioning through a competency-based approach.

Prerequisites: Program Admission.

Credits: 3

Lecture: 0

Lab: 9

ICE 150 - Bone Densitometry Certification

Description: This course offers the foundations of Bone Densitometry. Designed to support skill development in specific content areas and to ensure that entry-level bone densitometry technologists meet the training requirements set forth by the American Registry of Radiologic Technologists (ARRT) to challenge the post-primary examination.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

ICE 155 - Bone Densitometry Clinical Education

Description: Supervised clinical assignments follow a structured approach involving observation, assistance, and the achievement of specific bone densitometry competency benchmarks over the course of a semester. These experiences are designed to help students develop essential skills in patient care and bone densitometry positioning through a competency-based approach.

Credits: 3

Lecture: 0

Lab: 9

ICE 200 - Magnetic Resonance Certification

Description: Foundations of magnetic resonance (MR) scanning principles with respect to patient safety, instrumentation, protocols, scanning parameters, cross-sectional anatomy and pathology.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

ICE 210 - Magnetic Resonance Clinical Education I

Description: Supervised clinical assignments follow a structured approach involving observation, assistance, and the achievement of specific magnetic resonance competency benchmarks over the course of a semester. These experiences are designed to help students develop essential skills in patient care and magnetic resonance positioning through a competency-based approach.

Prerequisites: Program Admission.

Credits: 3
Lecture: 0
Lab: 9

ICE 250 - Mammography Initial Training

Description: Foundations of breast imaging, a brief overview of breast sonography, and an introduction to bone Densitometry. Designed to support skill development in specific content areas and to ensure that entry-level Mammography technologists meet the initial training requirements set forth by the Mammography Quality Standards Act and Program (MQSA), and the American Registry of Radiologic Technologists (ARRT) to challenge the post-primary examination.

Prerequisites: Program Admission.

Credits: 4
Lecture: 4
Lab: 0

ICE 255 - Mammography Clinical Education

Description: Supervised clinical assignments follow a structured approach involving observation, assistance, and the achievement of specific mammography competency benchmarks over the course of a semester. These experiences are designed to help students develop essential skills in patient care and mammographic positioning through a competency-based approach.

Prerequisites: Program Admission.

Credits: 3
Lecture: 0
Lab: 9

Industrial Plant Technology

IPT 261 - Machine Shop

Description: Theory and practice in history, concepts, safety and job planning in the machine shop.

Credits: 3
Lecture: 2
Lab: 3

IPT 295 - Apprenticeship: Industrial Plant

Description: Supervised field experience in the industrial plant, industrial machine mechanic, and/or automated industrial technology disciplines.

Prerequisites: Program Admission

Credits: 3
Lecture: Varies

Lab: Varies

IPT 296 - Internship: Industrial Plant Technician

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

IPT 299 - Independent Study Industrial Plant Technology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Paralegal Studies

LAW 100 - Introduction to Paralegal Studies

Description: Introduction to the role of the paralegal in the legal system, including the federal and state court systems, ethics, regulation and professional responsibility, legal analysis, research and basic legal concepts. Includes professional development and job search strategies.

Credits: 3

Lecture: 3

Lab: 0

LAW 102 - Legal Computer Applications

Description: Introduction to, and advanced application of, computer software applications used in a law office and the business community. Includes computer research tools, e-mail, application of general office management software to the legal environment, ethical considerations, and law office practice concepts, time and billing, calendaring, and docket control, case management, document management, litigation support, computer research tools, and ethical considerations.

Credits: 3

Lecture: 3

Lab: 0

LAW 103 - Ethics and the Law

Description: Ethical issues, cultural influences and moral theories as they relate to the legal profession. Origins and concepts of justice. State and national ethical codes and rules of professional responsibility. Ethical dilemmas and methods for researching answers. Professionalism and the unauthorized practice of law. Emphasis on critical thinking and values decision making.

Credits: 3

Lecture: 3

Lab: 0

LAW 104 - Wills, Trusts and Probate

Description: Critical issues, roles, and legal requirements in estate administration and pleadings.

Credits: 3

Lecture: 3

Lab: 0

LAW 107 - Law Office Management

Description: Processes and standards of law office management including record keeping, timekeeping, billing, calendaring and docket control. Emphasis on the principles and practices of law office management for manual and automated systems.

Credits: 3

Lecture: 3

Lab: 0

LAW 109 - Substantive Criminal Law

Description: Nature, origins, purposes, structure and operation of the American criminal justice system. Constitutional limitations. Classification and basic elements of crimes. Common defenses to crimes. Syllabus Available. This course is cross-listed with AJS 109.

Credits: 3

Lecture: 3

Lab: 0

LAW 202 - Real Estate Law

Description: Overview of legal requirements and the documents and forms relating to real property transactions. Real estate purchase and sale, various methods of holding title to real property, mortgages, lease agreements, liens and declarations of homestead.

Credits: 3

Lecture: 3

Lab: 0

LAW 203 - Family Law

Description: Legal aspects of domestic matters and family relationships. Emphasis on dissolution of marriage, community property, child custody, child support and support calculations, adoptions, guardianships, state involvement in family and parent-child relationships, and statutes relating to families and family relationships.

Credits: 3

Lecture: 3

Lab: 0

LAW 204 - Business Organizations

Description: Legal requirements of corporations, partnerships, LLCs, and sole proprietorships.

Credits: 3

Lecture: 3

Lab: 0

LAW 205 - Contracts

Description: General principles of the law of contracts and drafting of agreements, negotiable instruments, and sales.

Credits: 3

Lecture: 3

Lab: 0

LAW 212 - Juvenile Justice Procedures

Description: History and development of juvenile justice theories, procedures and institutions. This course is cross-listed with AJS 212.

Credits: 3

Lecture: 3

Lab: 0

LAW 214 - Juvenile Dependency Law

Description: Legal aspects of juvenile dependency with emphasis on child welfare proceedings, including child protection, foster care, child custody, and the government's authority and ability to provide assistance to families and protect children.

Credits: 3

Lecture: 3

Lab: 0

LAW 217 - Legal Research & Writing I

Description: Principles and techniques for conducting legal research. Emphasis on sources of law, utilization of primary and secondary sources, and case briefing. Extensive practice in writing research memoranda.

Prerequisites: LAW 100

Credits: 3

Lecture: 3

Lab: 0

LAW 218 - Legal Research and Writing II

Description: Application of research and writing skills in responding to complex legal issues and preparing complex legal documents.

Prerequisites: LAW 217

Credits: 3

Lecture: 3

Lab: 0

LAW 220 - Civil Procedure I

Description: Principles and procedures of civil litigation. Jurisdiction and venue, parties to action, and pleadings. Introduction to drafting of documents required from inception of civil action through the pleading stage, up to trial.

Prerequisites: LAW 100

Credits: 3

Lecture: 3

Lab: 0

LAW 221 - Civil Procedure II

Description: Study of the civil litigation process. Includes trial preparation, trial, evidence, and appeal.

Prerequisites: LAW 220

Credits: 3

Lecture: 3

Lab: 0

LAW 230 - Administrative Law

Description: Overview of Administrative Law in general, and in particular, how administrative bodies are regulated and function in Arizona. Emphasis placed on the actual representation of clients before such bodies, including procedural and hearing rules.

Prerequisites: LAW 100

Credits: 3

Lecture: 3

Lab: 0

LAW 232 - Evidence

Description: The basic rules that govern the admissibility of evidence in civil and criminal trial proceedings. Primary focus on how the Arizona Rules of Evidence operate in practice, with some attention to areas in which the Federal Rules of Evidence differ from the Arizona Rules.

Prerequisites: LAW 100

Credits: 3

Lecture: 3

Lab: 0

LAW 260 - Procedural Criminal Law

Description: Procedural criminal law. Emphasis on rationale underlying major court holdings, the resulting procedural requirements, and the effect on the daily operations of the criminal justice system. This course is cross-listed with AJS 260.

Credits: 3

Lecture: 3

Lab: 0

LAW 270 - Mediation and Negotiation

Description: Mediation and negotiation is an integral part of client representation in the legal system. Negotiation occurs routinely between the parties in an attempt to come to a resolution; however, mediation involves a voluntary process where a neutral mediator assists the parties in discussion in an effort to resolve their differences.

Prerequisites: LAW 221

Credits: 3

Lecture: 3

Lab: 0

LAW 275 - Bankruptcy

Description: Application of the legal process and procedures in bankruptcy, including jurisdiction, parties, investigation, interview, advising the client, and drafting documents related to the various bankruptcy options.

Credits: 3

Lecture: 3

Lab: 0

LAW 290 - Constitutional Law: Civil Liberties and Civil Rights

Description: Introduction to the United States and Arizona Constitutions from the integrated social science perspectives of history, geography, and government. The United States Constitution, including the Bill of Rights and the Fourteenth Amendment. Includes the impact of U. S. Supreme Court opinions and Arizona Supreme Court opinions on the history and development of civil liberties and civil rights, particularly as they pertain to the administration of justice and law enforcement. This course is cross-listed with AJS 290.

Credits: 3

Lecture: 3

Lab: 0

LAW 291 - Trial Advocacy

Description: Fundamental skills in representing clients in court, both civil and criminal, such as direct and cross examination, introduction of exhibits, impeachment of witnesses, opening statements, and closing arguments. Experiential learning with simulated mock trials will be utilized.

Prerequisites: Completion of, or enrollment in, the Paralegal Degree at Yavapai College, or from an equivalent, accredited institution; or, for those who hold a bachelor's degree, completion of, or enrollment in, the Legal Paraprofessional Certificate at Yavapai College, or an equivalent, accredited institution.

Credits: 3

Lecture: 3

Lab: 0

LAW 293 - Legal Paraprofessional

Description: An examination of the Legal Paraprofessional designation approved by the AZ Supreme Court, including licensure rules and examination/experiential requirements. The four practice areas ("Endorsements") of Family Law, Civil Practice, Criminal Law, and Administrative Law will be explored in detail. Designed for those who seek to sit for the Legal Paraprofessional exam.

Prerequisites: Completion of the Paralegal Degree at Yavapai College, or from an equivalent, accredited institution; or, for those who hold a bachelor's degree, completion of the Paralegal Certificate at Yavapai College, or an equivalent, accredited institution.

Credits: 3

Lecture: 3

Lab: 0

LAW 296 - Internship: Paralegal Studies

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; have completed the internship application process; and receive instructor approval.

Credits: 3

Lecture: Varies

Lab: Varies

LAW 298 - Special Legal Topics

Description: Introduction to a special legal topic and the role of the paralegal in the critical issues and requirements of the legal specialty area.

Credits: 3

Lecture: 3

Lab: 0

LAW 299 - Independent Study Paralegal Studies

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Leadership

LDR 111 - Leadership & Innovation

Description: Lead, motivate and inspire with leadership techniques to stimulate innovation.

Credits: 1

Lecture: 1

Lab: 0

LDR 112 - Leadership & Collaboration

Description: Basic techniques to increase team collaboration and strategies on how leaders effectively prioritize their time.

Credits: 1

Lecture: 1

Lab: 0

LDR 113 - Leadership & Communication

Description: Speaking skills and communication techniques for leaders.

Credits: 1

Lecture: 1

Lab: 0

LDR 201 - Leadership Essentials

Description: Leadership of organizations at any level, differences between management and leadership, and practical ways to overcome leadership challenges. Includes critical thinking and effective negotiation tools to motivate a team and apply emotional intelligence. Covers time management strategies to establish a healthy work-life balance.

Credits: 3

Lecture: 3

Lab: 0

LDR 202 - Strategic Leadership

Description: Leadership strategies utilizing effective communication tools, productive management teams, balancing resources, increase productivity and establishment of credibility.

Credits: 3

Lecture: 3

Lab: 0

LDR 203 - Organizational Leadership

Description: Leadership and organizational effectiveness with focus on functions of individuals, organizational design, human motivation and behavior patterns.

Credits: 3

Lecture: 3

Lab: 0

LDR 299 - Independent Study Leadership

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

LDR 300 - Fundamentals of Leadership

Description: Foundational process of effective leadership. Topics include leadership theories, communication traits, the distinction between leadership and management, review and evaluation of great leaders, self-assessment of personal development, and exploration of fundamental research-based principles.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

LDR 420 - Leadership and Change Management

Description: Examination of best practices in organizational leadership and change management, including strategic communication, personnel motivational factors, decision-making framework, and creating optimal organizational culture.

Prerequisites: Program Admission. LDR 300

Credits: 3

Lecture: 3

Lab: 0

LDR 425 - Leadership Application and Development

Description: Application of leadership theories and intervention strategies to positively influence groups. Includes examination of researched/evidence-based theories of leadership and adopting a leadership style to lead effectively.

Prerequisites: Program Admission. LDR 300.

Credits: 3

Lecture: 3

Lab: 0

LDR 430 - Managing Talent and Developing Leaders

Description: Introduction to managing the performance of individuals, teams, and the entire organization. Examination of major facets for creating a work environment that enables employees to thrive using talent management systems. Includes developing core competencies, designing and implementing performance management systems, identifying, assessing, and developing talent, delivering performance coaching for individuals and teams, and driving employee engagement and retention.

Prerequisites: Program Admission. LDR 300.

Credits: 3

Lecture: 3

Lab: 0

LDR 485 - Entrepreneurial Leadership

Description: The relationship between entrepreneurship, value creation, and the entrepreneurial leader's role in driving innovation and growth. Entrepreneurial leadership factors needed for defining a visionary organizational culture by motivating individuals to achieve common objectives through innovation and creating value. Topics of study also include strategic management, risk optimization, navigating uncertainty, and capitalizing on opportunities.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, ECN 236, and LDR 300.

Credits: 3

Lecture: 3

Lab: 0

Licensed Practical Nursing

LPN 101 - Fundamentals of Practical Nursing Care I

Description: Introduction to the fundamental concepts of practical nursing care for clients with selected alterations in physical, mental, and psychosocial health. Presents a holistic approach to client care using QSEN competencies, and /or related concepts such as caring, clinical judgement, nursing process, communication and documentation, safety, QI, culture and spirituality, psychosocial care, pain management, delegation, as well as teaching and learning for the adult client populations. Introduces the competencies of practical nursing knowledge to include client-centered care, informatics and technology, teamwork and collaboration, safety, quality improvement, and evidence-based practice.

Prerequisites: Program Admission.

Corequisites: LPN 105, LPN 110, and LPN 115.

Credits: 4

Lecture: 4

Lab: 0

LPN 105 - Development of Practical Nursing

Description: Introduction to theoretical concepts that direct practical nursing skills and development of practical nursing practice. Uses the nursing process as a framework for care and implementation of appropriate nursing interventions for the adult, obstetric, newborn, and pediatric client in the laboratory setting. Integrates the competencies of practical nursing practice to include client centered care, professionalism, communication, teamwork, collaboration, safety, quality, informatics, and evidence-based practice. Basic practical nursing skills are developed.

Prerequisites: Program admission.

Corequisites: LPN 101, LPN 110, and LPN 115.

Credits: 2

Lecture: 1

Lab: 3

LPN 110 - Application of Practical Nursing I

Description: Application of theoretical concepts of wellness and illness, integrating the nursing process and applying basic practical nursing skills in meeting the physical, mental, and psychosocial health care needs of diverse adult client populations in the long term and rehabilitation environment. Clinical practicum occurs in well-defined settings and integrates the competencies of practical nursing practice to include client centered care, professionalism, communication, teamwork, collaboration, safety, quality, informatics, and evidence-based practice. Clinical group pre-conference and post-conference discussions occur with application of theoretical concepts.

Prerequisites: Program Admission.

Corequisites: LPN 101, LPN 105, and LPN 115.

Credits: 3

Lecture: 0

Lab: 6

LPN 115 - Pharmacology for Practical Nursing I

Description: Introduction of principles of pharmacology as related to the nursing process to explore relationships occurring between anatomy, physiology, disease states, life stages, and medications. Introduction to national standards for safety in pharmacologic therapy. Integrates the competencies related to adult, newborn and pediatric client centered care, professionalism, communication, teamwork, collaboration, safety, quality, informatics, and evidence-based practice.

Prerequisites: Program Admission.

Corequisites: LPN 101, LPN 105, and LPN 110.

Credits: 2

Lecture: 2

Lab: 0

LPN 190 - Practical Nursing Transition

Description: Overview of the role of the practical nurse in the care of clients. Includes nursing standards and scope of practice of the practical nurse. Focus on the role of the practical nurse in providing care through interventions consistent with established nursing care plans.

Prerequisites: NSG 151, NSG 152, NSG 153, NSG 154, NSG 155, BIO 205

Credits: 1.5

Lecture: 1.5

Lab: 0

LPN 201 - Fundamentals of Practical Nursing Care II

Description: Concepts of practical nursing care for clients with commonly occurring alternations in their physical, mental, and psychosocial health, utilizing the nursing process to apply critical thinking skills, and previously learned concepts. Concepts related to the practical nurse's contributions to assessment, planning, and nursing diagnosis, with emphasis on implementation. Incorporation of a holistic approach to the physical, mental, and psychosocial health care needs of the adult, obstetric, newborn, and pediatric client, as well as teaching and learning for the obstetric, newborn and pediatric client populations. Integrates the competencies of nursing knowledge to include client-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics.

Prerequisites: LPN 101, LPN 105, LPN 110, and LPN 115.

Corequisites: LPN 205, LPN 210, and LPN 215.

Credits: 4

Lecture: 4

Lab: 0

LPN 205 - Advanced Development of Practical Nursing

Description: Continuation of theoretical concepts that direct practical nursing skills and the development of nursing practice. Uses the nursing process as a framework for care and implementation of appropriate nursing interventions in

the laboratory setting. Integrates the competencies of nursing practice to include client centered care for the adult, obstetric, newborn, and pediatric client, professionalism, communication, teamwork, collaboration, safety, quality, informatics, and evidence-based practice. Intermediate to advanced practical nursing skills are developed.

Prerequisites: LPN 101, LPN 105, LPN 110, and LPN 115.

Corequisites: LPN 201, LPN 210, and LPN 215.

Credits: 2

Lecture: 1

Lab: 3

LPN 210 - Application of Practical Nursing II

Description: Application of theoretical concepts of wellness and illness of previously learned clinical concepts. Integrate therapeutic interventions using the nursing process to adapt client centered care to meet the physical, mental, and psychosocial health care needs of diverse adult, obstetrical, newborn, and pediatric populations in the acute care and outpatient environments. Clinical practicum occurs in well-defined settings and integrates the competencies of nursing practice to include client centered care, professionalism, communication, teamwork, collaboration, safety, quality, informatics, and evidence-based practice.

Prerequisites: LPN 101, LPN 105, LPN 110, and LPN 115.

Corequisites: LPN 201, LPN 205, and LPN 215.

Credits: 3

Lecture: 0

Lab: 6

LPN 215 - Pharmacology for Practical Nursing II

Description: Examination of principles of pharmacology, and the relationship occurring between anatomy, physiology, disease states, life stages and medications. Reinforces national standards for safety in pharmacologic therapy. Integrates the competencies related to client centered care, professionalism, communication, teamwork, collaboration, safety, quality, informatics, and evidence-based practice.

Prerequisites: LPN 101, LPN 105, LPN 110, and LPN 115.

Corequisites: LPN 201, LPN 205, and LPN 210.

Credits: 2

Lecture: 2

Lab: 0

Mathematics

MAT 082 - Fundamentals of Mathematics

Description: Review of basic arithmetic skills, introduction to geometric shapes and formulae, ratio and proportion, percents, measurement, and signed numbers.

Credits: 3
Lecture: 3
Lab: 0

MAT 092 - Beginning Algebra

Description: Solving linear equations and inequalities, graphs of linear equations, systems of linear equations and inequalities, exponents, basic operations on polynomials, an introduction to functions, and an introduction to mathematics technology.

Prerequisites: MAT 082 or a satisfactory score on the mathematics skills assessment.

Credits: 3
Lecture: 3
Lab: 0

MAT 097 - Intermediate Algebra

Description: Simplifying polynomial, rational and radical expressions; solving quadratic, rational and radical equations; introducing functions and their representations; applying mathematics in real-world contexts; and using appropriate technology.

Prerequisites: MAT 092 or a satisfactory score on the mathematics skills assessment.

Credits: 3
Lecture: 3
Lab: 0

MAT 100 - Technical Mathematics

Description: Review of arithmetic skills, proportions, percentages, exponents, algebraic equations of the first degree, basic geometry, and literal equations with applications designed for the student's own field of study.

Prerequisites: MAT 082 or a satisfactory score on the mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 3
Lecture: 3
Lab: 0

MAT 141 - College Mathematics with Review

Description: Survey of mathematical topics and applications. Includes statistics, probability, exponential functions, finance, dimensional analysis and other selected discrete math topics with one hour per week of additional instruction provided by course instructor.

Prerequisites: Satisfactory score on the mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 4
Lecture: 4
Lab: 0

MAT 142 - College Mathematics

Description: Topics and applications in counting, probability, statistics, dimensional analysis, mathematical modeling, and consumer mathematics.

Prerequisites: MAT 092 or a satisfactory score on the mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 3
Lecture: 3
Lab: 0

MAT 152 - College Algebra

Description: Modeling of applications using linear, quadratic, exponential and logarithmic functions. Introduction to solving systems of equations using matrices. Duplicate credit for MAT 152 and MAT 182 will not be awarded.

Prerequisites: MAT 097 or a satisfactory score on the mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 3
Lecture: 3
Lab: 0

MAT 156 - Mathematics for Elementary Teachers I

Description: Mathematical principles and processes specifically for elementary teachers. Includes problem solving, set theory, properties and operations with number systems. Note: Computer use required.

Prerequisites: MAT 141, MAT 142, MAT 152 or satisfactory score on mathematics skills assessment.

Credits: 3
Lecture: 3
Lab: 0

MAT 157 - Mathematics for Elementary Teachers II

Description: Mathematical principles and processes specifically for elementary teachers. Includes geometry, measurement, statistics, and probability. Note: Computer use required.

Prerequisites: MAT 141, MAT 142, MAT 152 or satisfactory score on mathematics skills assessment.

Credits: 3
Lecture: 3

Lab: 0

MAT 167 - Elementary Statistics

Description: Statistical tools and techniques used in research and general applications. Description of sample data, probability and probability distributions, point and interval estimates of population parameters, hypothesis testing, and correlation and regression. Note: Statistics technology is required.

Prerequisites: MAT 141, MAT 142, MAT 152, or satisfactory score on mathematics skills assessment.

Credits: 3

Lecture: 3

Lab: 0

MAT 172 - Finite Mathematics

Description: Various analytical methods employed in business, social and life sciences with an emphasis on applications. Topics include linear programming, matrix operations, system of linear equations, applications of simple, compound and continuous interest, counting, probability and statistics.

Prerequisites: MAT 152 or satisfactory score on mathematics skills assessment.

Credits: 3

Lecture: 3

Lab: 0

MAT 182 - Precalculus (Algebra)

Description: Topics from college algebra essential to the study of calculus and analytic geometry. Includes the definition of and operations with functions, identifying characteristics of and graphing functions, and applications of functions. Types of functions include a review of linear functions and an in-depth examination of nonlinear functions (quadratic, polynomial and power, rational, exponential and logarithmic). Duplicate credit for MAT 182 with MAT 152 will not be awarded. Note: Computer use and/or graphing calculator required.

Prerequisites: MAT 097 or a satisfactory score on the mathematics skills assessment.

Credits: 3

Lecture: 3

Lab: 0

MAT 183 - Precalculus (Trigonometry)

Description: Topics from trigonometry essential to the study of calculus and analytic geometry. Includes trigonometric functions, radian measure, right and oblique triangle solutions, trigonometric identities and equations, and inverse trigonometric functions. Note: Computer use and or graphing calculator required.

Prerequisites: MAT 097 or a satisfactory score on the mathematics skills assessment.

Credits: 2

Lecture: 2

Lab: 0

MAT 212 - Topics in Calculus

Description: Introduction to the theory and techniques of differential and integral calculus of elementary functions with emphasis on applications in business and finance.

Prerequisites: MAT 152 or satisfactory score on mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 3

Lecture: 3

Lab: 0

MAT 220 - Calculus and Analytic Geometry I with Review

Description: Introduction to calculus of single variable functions. Includes limits, the fundamental principles of differentiation and integration, techniques for finding derivatives of algebraic and trigonometric functions and applications of derivatives.

Prerequisites: MAT 187 (or MAT 182 and MAT 183) or satisfactory score on mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 5

Lecture: 5

Lab: 0

MAT 221 - Calculus and Analytic Geometry I

Description: Introduction to calculus of single variable functions. Includes limits, the fundamental principles of differentiation and integration, techniques for finding derivatives of algebraic and trigonometric functions and applications of derivatives.

Prerequisites: MAT 187 (or MAT 182 and MAT 183) or satisfactory score on mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 4

Lecture: 4

Lab: 0

MAT 230 - Calculus and Analytic Geometry II

Description: Concepts, techniques and applications of integration, infinite series, and introduction to differential equations.

Prerequisites: MAT 220

General Education Competency: Quantitative Literacy

Credits: 5

Lecture: 5

Lab: 0

MAT 241 - Calculus III

Description: Multivariable calculus. Includes multiple integration, partial differentiation, optimization, vector calculus, line integrals, and parametric curves.

Prerequisites: MAT 230

General Education Competency: Quantitative Literacy

Credits: 4

Lecture: 4

Lab: 0

MAT 262 - Elementary Differential Equations

Description: Introduction to ordinary differential equations. Includes first order linear equations, higher order linear equations, applications of first and second order equations, Laplace transforms, and systems of linear differential equations.

Prerequisites: MAT 241

General Education Competency: Quantitative Literacy

Credits: 3

Lecture: 3

Lab: 0

MAT 296 - Internship: Math

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

MAT 299 - Independent Study Mathematics

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Manufacturing Engineering Tech

MET 110 - Manufacturing Technology

Description: Introduction to machine shop techniques to include familiarization with machining, welding, sheet metal forming and assembling.

Credits: 2
Lecture: 1
Lab: 3

MET 116 - Rigging

Description: Basic rigging techniques, hitch configurations, safe loading practices, load inspection, and American National Standards Institute (ANSI) approved hand signals. Use of slings and common rigging hardware.

Credits: 1
Lecture: 1
Lab: 0

MET 150 - Surface Mine Safety Training

Description: U.S. Mine Safety and Health Administration requirements for new miner training for individuals, contractors, and mine employees.

Credits: 1
Lecture: 1
Lab: 0

MET 198 - Manufacturing Topics:

Description: Exploration of manufacturing topics outside of our standard curriculum.

Credits: 1-3
Lecture: Varies
Lab: Varies

MET 200 - SolidWorks for Non-Engineers

Description: Fundamentals of graphical user interfaces for computer-aided drawing, including sketching, computer-aided drafting, and parameter-based modeling. Designed for non-engineering majors.

Credits: 3
Lecture: 2
Lab: 2

MET 250 - Projects in Manufacturing Technology

Description: Manufacturing technology principles and techniques including primary and secondary processes, rapid prototyping, quality control principles and optimization manufacturing techniques.

Prerequisites: CNC 102 or CNC 201 or EGR 102 or EGR 180 or MET 200 or instructor permission. (may be taken concurrently)

Credits: 4

Lecture: 3

Lab: 3

MET 296 - Internship: Manufacturing Engineering Technology

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

MET 299 - Independent Study Industrial Technology/Manufacturing

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Management

MGT 120 - Supervision Techniques

Description: Supervisory techniques and skill building. Includes decision making, problem solving, motivational leadership, human resource management processes, conflict resolution, change management and team-building.

Credits: 3

Lecture: 3

Lab: 0

MGT 132 - Ethics in Business

Description: Techniques to analyze and resolve modern business ethics issues: legal issues, corporate social responsibility, worker's rights and responsibilities, technological issues, information and advertising.

Credits: 3

Lecture: 3

Lab: 0

MGT 140 - Organizational Behavior

Description: Study of basic business behavior patterns. Human aspects of business, as distinguished from economic and technical aspects, and how they influence efficiency, morale, and management practice.

Credits: 3

Lecture: 3

Lab: 0

MGT 180 - Business Software and Communications

Description: Professional and essential communication strategies for entrepreneurs. Business application software and the creation of business communications including word processing, spreadsheets, and presentation script graphics.

Credits: 3

Lecture: 3

Lab: 0

MGT 183 - Managing Business Finances

Description: Creating and maintaining budgets for a successful business venture. Emphasis on financial planning to guide, track performance and provide data to monitor and adjust business objectives. Includes the development and interpretation of financial statement information to assist in making better financial decisions for positive business operations.

Credits: 3

Lecture: 3

Lab: 0

MGT 188 - Competitor Differentiation

Description: Skills for entrepreneurs to promote their businesses on social media and to analyze data for continual optimization of competitor differentiation.

Credits: 3

Lecture: 3

Lab: 0

MGT 190 - Path to Patent

Description: The Path to a Patent course introduces students to the fundamentals of intellectual property with a focus on patent processes. Students will learn about different types of intellectual property, drafting provisional applications, conducting preliminary searches, understanding claims, and international considerations. Special emphasis is given to practical skills in patent application filing, claim development, and strategies to avoid common post-filing issues.

Credits: 3

Lecture: 3

Lab: 0

MGT 195 - Introduction to Trademarks

Description: Trademark Basics focuses on different aspects of trademarks and the registration process, from filing and examination to post-registration requirements for keeping your registration alive.

Credits: 3

Lecture: 3

Lab: 0

MGT 220 - Principles of Management

Description: Principles of management that have general applicability to all types of enterprise; basic management philosophy and decision making; principles involved in planning, directing and controlling. Contemporary concepts in management.

Credits: 3

Lecture: 3

Lab: 0

MGT 223 - Human Resource Management

Description: Human resource theory and practice, planning, recruitment, placement, employee development, evaluation, benefits and services, health and safety, and employee relations.

Credits: 3

Lecture: 3

Lab: 0

MGT 229 - Strategic Management

Description: Examination of how the business organization constructs, organizes, extends, maintains, and renews its competitive advantage in the marketplace.

Credits: 3

Lecture: 3

Lab: 0

MGT 233 - Business Communication

Description: Communication theory, writing for the workplace, business letters and reports, electronic communication, professional presentations and communicating for employment.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

MGT 281 - High Performance Management

Description: Attainment of continuous support in hiring the right people, motivating others, establishing expectations, and building relationships with direct reports. Skills to effectively enhance the management of employee performance for successful business achievement.

Credits: 3

Lecture: 3

Lab: 0

MGT 283 - Operations Management

Description: Strategies and processes for efficient operational and administrative functions. Skills for business operations to manage vendors, customers, and employees for sustained growth.

Credits: 3

Lecture: 3

Lab: 0

MGT 285 - Growing your Business

Description: Skills to develop a growth strategy that mitigates challenges and optimizes opportunities. Proven business theories and strategic tools used to integrate marketing with other key business functions.

Credits: 3

Lecture: 3

Lab: 0

MGT 288 - Business Plan Development

Description: Guidelines of form and content of a complete and fully developed business plan ready to solicit financing or venture capital. Includes the purpose of a good plan and how to use it to help capitalize on business opportunities and successfully mitigate challenges.

Prerequisites: MGT 183 and MGT 188 and MGT 280 and MGT 281 and MGT 283 and MGT 285

Credits: 3

Lecture: 3

Lab: 0

MGT 299 - Independent Study Management

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

MGT 320 - Business Process Improvement

Description: Introduction to concepts and approaches for improving business operation processes, providing an examination of a variety of frameworks for assessing performance as well as identifying and prioritizing improvement opportunities. Investigation of project management techniques and tools while emphasizing organizational considerations in implementation and management of workflows.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

MGT 325 - Supportive and Collaborative Management

Description: Essential skills practiced by business managers to harness different viewpoints to create a productive and engaging organizational culture. Focus is given to current challenges and best practices in creating, sustaining, and cultivating a supportive and collaborative workplace.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

MGT 380 - Introduction to Entrepreneurship

Description: Entrepreneurship fundamentals ranging from thinking through ideas, planning a business, managing a business, and considerations for growing a small business into an enterprise. Special emphasis will be given to new opportunity discovery and business plan drafting.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

MGT 385 - Customer Relations and Service Management

Description: An in-depth study of the methods and techniques employed by various industries to accomplish effective and efficient customer service operations. Includes the business facets of human resource management and customer relationship management within any business environment.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

Marketing

MKT 231 - Social Media Marketing

Description: Theory and practice in the use of social media in online marketing. Includes history of social media, preparation for social media marketing, and ways to engage with social media. Reviews platforms and marketing tools used to create social media campaigns.

Credits: 3

Lecture: 3

Lab: 0

MKT 240 - Principles of Marketing

Description: Examines the business function of Marketing. Focus is on how marketers deliver value in satisfying customer needs and wants, determining which target markets the organization can best serve, and deciding upon appropriate products, services, and programs to serve these markets.

Credits: 3

Lecture: 3

Lab: 0

MKT 280 - Marketing Tactics and Techniques

Description: Marketing tactics and techniques entrepreneurs need to successfully market their product or service. Includes relationship marketing pivotal for a customer-driven marketing strategy that will lead to a strong brand and business growth.

Credits: 3

Lecture: 3

Lab: 0

MKT 310 - Digital Marketing Landscape

Description: Comprehensive overview of the expansive digital marketing landscape. Includes market trends, advertising strategies, and data analytics and provides a strong foundation in social media, SEO, and content marketing.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

MKT 320 - Digital Audience Strategy

Description: Key elements of driving audience growth and engagement, including how to measure and analyze customer interaction, how to use those measurement skills and develop strategies and tactics to grow through search, social and content creation. Also, how to develop lasting connections with the target audience.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 3

Lab: 0

MKT 340 - Marketing Management

Description: Examination of the language and issues of marketing with an emphasis on learning to develop a marketing plan and develop responsive marketing strategies to meet customer needs. Other topics of study will focus on the external environment, marketing research, international/global marketing with relevance to cultural diversity, ethics, the impact of technology on marketing, and careers in marketing.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, ECN 236, and MKT 240.

Credits: 3

Lecture: 3

Lab: 0

MKT 410 - Brand Strategy: Tactics & Digital Tools

Description: Brand strategy for cultivating enduring customer relationships and fostering competitiveness in evolving digital markets. Tools and tactics to create persuasive content, utilize data for media design, and strategize with paid and owned digital media. Skills in strategic storytelling, content calendars, and social media strategy for a comprehensive understanding of digital branding.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3

Lecture: 2

Lab: 3

MKT 420 - Neuromarketing and Social Media Management

Description: Effective social media management campaigns that deeply connect with the audience and evoke consumer feelings. Role of neuromarketing in measuring consumer physiological and neural signals, and consumer motivations, preferences, and decisions. Role of emotional and artificial intelligence in shaping social media campaigns.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3
Lecture: 3
Lab: 0

MKT 430 - Digital Marketing Data and Analytics

Description: Data-driven decision-making as a cornerstone for successful digital marketing. Collection, analysis, and interpretation of data to measure the effectiveness of marketing campaigns and the formulation of data-driven recommendations for improvement.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3
Lecture: 3
Lab: 0

MKT 480 - Strategic Digital Marketing

Description: Key elements of a successful digital marketing strategy, including how business objectives drive marketing objectives, how customer-based insights support the development of market-led strategies, and components of an integrated digital marketing strategy. Also includes how to obtain, convert and retain customers for business growth, and the interpretation of data to solve problems and adjust strategy.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3
Lecture: 3
Lab: 0

MKT 490 - Entrepreneurial Marketing

Description: Application of marketing methods and techniques for entrepreneurs to create sales growth and profitability for their business. Includes developing strategies for targeting customers, using market research to make valid decisions, promotion and pricing strategies to promote market share, and continued market plan analysis to grow a business.

Prerequisites: Program Admission. ACC 131, BSA 131, BSA 228, ECN 232, and ECN 236.

Credits: 3
Lecture: 3
Lab: 0

Military Science Leadership ROTC

MSL 101 - Basic Military Science I

Description: A study of the defense establishment and the organization and development of the U.S. Army. A study of the roles that active Army forces, Army Reserve forces, and the Army National Guard play in our nation's defense. A Study of military courtesy, customs, and traditions of the service. A historical perspective of the role of the different branches of the U.S. Army and the role they have played in the freedom of our nation. An introduction to physical

readiness training. Course includes lectures and laboratory. Field training exercises normally include M16-A1 rifle firing, rappelling training, and airmobile helicopter operations.

Corequisites: MSL 101L

Credits: 1

Lecture: 1

Lab: 0

MSL 101L - Basic Military Science I Laboratory

Description: Leadership laboratory with emphasis on military leadership and small unit tactics. Students develop leadership abilities through hands-on practical experiences. Training is introductory in scope and includes operations and tactics and land navigation subjects. Practical training exercises familiarize students with the field environment and field survival skills. The Army Physical Fitness Test (APFT) is administered to assess the state of physical development.

Corequisites: MSL 101

Credits: 1

Lecture: 0

Lab: 2

MSL 102 - Basic Military Science II

Description: Continued emphasis on physical readiness training. Course includes lecture and laboratory. Field training exercises normally include M16-A1 rifle firing, rappelling training, and airmobile helicopter operations.

Corequisites: MSL 102L

Credits: 1

Lecture: 1

Lab: 0

MSL 102L - Basic Military Science II Laboratory

Description: Leadership laboratory with emphasis on military leadership and small unit tactics. Students develop leadership abilities through hands-on practical experiences. Training continues the leader development process while remaining introductory in scope and develops basic operations and tactics and land navigation skills. Practical training exercises continue cadet field orientation with the focus on individual training. Special topics, including stream-crossing techniques, field survival skills, and bivouac techniques, are covered. The Army Physical Fitness Test (APFT) is administered to assess the state of physical development.

Corequisites: MSL 102

Credits: 1

Lecture: 0

Lab: 2

Motorcycle Technology

MTC 105 - Introduction to Motorcycle and UTV Technology

Description: Basic theory and fundamentals of motorcycle and UTV maintenance and minor repair. Includes two- and four-stroke theory, brakes, frames, drive trains, electrical, suspension, fuel systems, and wheels.

Credits: 3

Lecture: 2

Lab: 3

MTC 215 - Motorcycle and UTV Service Procedures

Description: Common fundamental repairs most often needed in motorcycles and UTVs.

Credits: 3

Lecture: 1

Lab: 4

MTC 299 - Independent Study Motorcycle Technology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Music

MUS 101 - Private Music

Description: Individual, self-paced instruction in piano, organ, voice, guitar, band or orchestra instruments. Open to all students in the college.

Credits: 1

Lecture: 0

Lab: 0

MUS 101A - Private Music

Description: Individual, self-paced instruction in piano, organ, voice, guitar, band or orchestra instruments. Open to all students in the college.

Credits: 1

Lecture: 0

Lab: 0

MUS 103 - Piano Class I

Description: A skill-building piano lab with an emphasis on piano playing and music reading.

Credits: 1

Lab: 3

MUS 104 - Piano Class II

Description: Skill-building piano lab for students with limited piano experience. Emphasis on piano playing, music reading, and music theory.

Prerequisites: MUS 103

Credits: 1

Lab: 3

MUS 105 - Voice Class I

Description: Fundamentals of singing. Includes breath support and articulation while singing and introductory-level music reading.

Credits: 1

Lab: 3

MUS 106 - Voice Class II

Description: Intermediate voice class designed to advance individual singing skills by study and training in singing technique, musicianship, diction, performance and in repertoire.

Prerequisites: MUS 105

Credits: 1

Lab: 3

MUS 110 - Concert Band

Description: Instruction and performance of concert band literature in a group setting.

Credits: 1

Lab: 3

MUS 111 - Symphonic Band

Description: Open to all students in the College. Attendance at all rehearsals and participation in all public performances is required.

Credits: 1

Lab: 3

MUS 113 - Big Band I

Description: Rehearsal and performance of selected intermediate level jazz literature. Audition required. Additional required performances.

Credits: 1

Lab: 3

MUS 114 - Big Band II

Description: Rehearsal and performance of selected advanced level jazz literature. Audition required. Additional required performances.

Credits: 1

Lab: 3

MUS 115 - Instrumental Ensemble

Description: Music reading skills, playing techniques, ensemble playing. Performance participation required. Audition required.

Credits: 1

Lab: 3

MUS 116 - Jazz Combo

Description: Jazz music reading skills, playing techniques, ensemble playing. Performance participation required.

Credits: 1

Lab: 3

MUS 117 - Symphony Orchestra

Description: Symphony orchestra rehearsal and performance.

Credits: 1

Lab: 3

MUS 120 - Music Ensemble:

Description: Rehearsal and performance of historically/socially significant pieces of music, with an emphasis on understanding the role of the individual musicians within a larger ensemble. Primarily focused on technical control, timbre, and stylistic accuracy of applied instruments. Limited rehearsals and performances outside of times listed required.

Credits: .5

Lecture: 0

Lab: 1.5

MUS 129 - Music Fundamentals

Description: Basic elements of music reading and notation as well as an aural component including identification and dictation. Designed for non-majors (hobbyist, church choir member, pop musician) or the musician with limited to no music reading skill.

Credits: 2

Lecture: 2

Lab: 0

MUS 131 - Basic Integrated Theory I

Description: Basic theory of music including part writing, ear training, sight singing, dictation and keyboard harmony. Review of musical notation, intervals, triads and scales. Part writing skills for root position, first and second inversion triads; sight singing and dictation skills through scale passages including intervals of 3rd and 4ths and simple beat divisions. Required of music majors.

Credits: 4

Lecture: 4

Lab: 1

MUS 132 - Basic Integrated Theory II

Description: Correlating part writing, ear training, sight singing, dictation and keyboard harmony. Part writing skills in phrase structure and cadences, harmony progression, harmonization techniques and use of non-harmonic tones; sight singing and dictation skills through minor scale passages, intervals of 5ths through the octave and 16th note beat divisions. Required of music majors.

Prerequisites: MUS 131

Credits: 4

Lecture: 4

Lab: 1

MUS 134 - Singing for the Actor

Description: Study and development of the voice as it relates to the Musical Theatre genre. An integrated approach to singing through the application of music reading skills, characterization, and the analysis and performance of standard repertoire. Designed for aspiring actors, singers, and dancers.

Credits: 3

Lecture: 2

Lab: 2

MUS 145 - Music of World Cultures

Description: Cultural and historical ethnic music contributions throughout the world. Social, cultural and spiritual factors affecting music. Emphasis on listening skills, style characteristics, properties of sound and elements of music on various instruments.

Prerequisites: Reading Proficiency.

Credits: 3

Lecture: 3

Lab: 0

MUS 151 - Applied Music

Description: Individual instruction in piano, organ, voice, guitar, band or orchestra instruments for music majors.

Credits: 2

Lecture: 0

Lab: 0

MUS 151A - Applied Music

Description: Individual instruction in piano, organ, voice, guitar, band or orchestra instruments for music majors.

Credits: 2

Lecture: 0

Lab: 0

MUS 151B - Applied Music

Description: Individual instruction in piano, organ, voice, guitar, band or orchestra instruments for music majors.

Credits: 2

Lecture: 0

Lab: 0

MUS 198 - Music Topics:

Description: Exploration of music techniques and expression.

Credits: 1-3

Lecture: 1-3

Lab: 0

MUS 203 - Piano Class III

Description: Designed for students with some piano experience. Emphasis on advanced accompaniment skills.

Prerequisites: MUS 104

Credits: 1

Lab: 3

MUS 204 - Piano Class IV

Description: Designed for students with some piano experience. Emphasis on interpretation.

Prerequisites: MUS 203

Credits: 1

Lab: 3

MUS 222 - Chamber Singers

Description: Rehearsal and performance of selected choral literature. Membership by audition.

Credits: 1

Lab: 3

MUS 223 - Vocal Ensemble

Description: Rehearsal and performance of selected choral literature. No audition required.

Credits: 1

Lab: 3

MUS 224 - Master Chorale

Description: Rehearsal and performance of selected major choral literature. Membership by audition.

Credits: 1

Lab: 3

MUS 225 - Community Chorale

Description: Rehearsal and performance of selected choral literature. No audition required.

Credits: 1

Lab: 3

MUS 227 - Women's Chorale

Description: Rehearsal and performance of selected choral literature. Audition required.

Credits: 1

Lab: 3

MUS 231 - Advanced Integrated Theory I

Description: Advanced theory of music correlating concepts of part writing, sight singing, ear training, dictation and keyboard harmony. Part writing skills using 7th chords, secondary dominants and altered non-harmonic tones, modulation and borrowed chords; sight singing and dictation skills through altered intervals and syncopated rhythms; keyboard skills realizing a figured bass. Required of music majors.

Prerequisites: MUS 132

Credits: 4

Lecture: 4

Lab: 1

MUS 232 - Advanced Integrated Theory II

Description: Correlating advanced concepts of part writing, sight singing, ear training, dictation and keyboard harmony. Part writing skills using augmented 6th chords, chromatic mediants and modulations to foreign keys, sight singing and dictation skills through two, three and four parts; keyboard skills realizing a figured bass. Required of music majors.

Prerequisites: MUS 231

Credits: 4

Lecture: 4

Lab: 1

MUS 240 - Music Appreciation

Description: Explores the common elements of rhythm, melody, harmony, and form as they connect with the heritage of human understanding. Examines issues of universal human concern that are reflected in all styles of music from folk to classical.

Prerequisites: ENG 101 or ENG 103

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

MUS 296 - Internship: Music

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Corequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: 3

Lab: 0

MUS 299 - Independent Study Music

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Media and Extended Realities

MXR 110 - Digital Environmental Design

Description: Fundamental architectural principles that guide the creation of digital environments. Manipulation of time and narrative pacing to create dynamic digital environments. Creation of immersive atmospheres through the consideration of lighting and sound design.

Credits: 3
Lecture: 2
Lab: 3

MXR 210 - Programming for Extended Realities

Description: Programming fundamentals in the context of XR development. Hardware components and devices commonly used for AR, VR, and XR experiences. Development for industry-standard platforms and devices.

Prerequisites: MXR 110, CSC 125, and ART 130.

Credits: 3
Lecture: 2
Lab: 3

MXR 220 - 3D Simulation and Visualization

Description: Utilization of skills required to create 3D digital experiences. Navigate industry-standard 3D visualization software. Create models and assets for use in interactive experiences. Best practices for 3D simulation and visualization.

Prerequisites: MXR 210 (may be taken concurrently), VGD 151, and (MET 200 or EGR 180).

Credits: 3
Lecture: 2
Lab: 3

MXR 230 - Advanced XR Projects

Description: Design of XR environments, 3D assets, and immersive user experiences culminating in an experiential capstone project. Techniques for optimizing 3D models, textures, and animations tailored to XR platforms.

Prerequisites: MXR 220 (may be taken concurrently), ART 233, and VGD 180.

Credits: 3
Lecture: 0
Lab: 9

Nursing

NSG 140 - Nursing Theory I

Description: Introduction to the fundamentals of nursing care for clients with selected alterations in health, utilizing the nursing process as a framework for care. Presents a holistic approach to assessment using QSEN competencies, and /or related nursing concepts. Introduces the competencies of nursing knowledge to include patient-centered care, professionalism, informatics and technology, teamwork and collaboration, safety, quality improvement, and evidence-based practice.

Prerequisites: Program Admission.

Credits: 4

Lecture: 4

Lab: 0

NSG 142 - Application of Nursing Theory I

Description: An introductory clinical course with application of theoretical concepts of wellness and illness; emphasis on basic nursing skills and application of nursing process in meeting the needs of diverse clients. Clinical practicum occurs in well-defined settings and integrates the competencies of nursing practice to include; patient centered care, professionalism, communication, teamwork and collaboration, safety, quality, informatics and evidence-based practice. Clinical group pre-conference and post-conference discussions occur with application of theoretical concepts.

Prerequisites: Program Admission.

Credits: 2

Lecture: 0

Lab: 4

NSG 143 - Development of Nursing Practice I

Description: Introduces theory that directs nursing skills and the development of nursing practice. Uses the nursing process as a framework for care and implementation of appropriate nursing interventions. Basic to intermediate nursing skills are developed.

Prerequisites: Program Admission.

Credits: 2

Lecture: 1

Lab: 3

NSG 144 - Mental Health Nursing Theory I

Description: Introduction to the concepts of psychosocial nursing care for clients throughout the life span. Emphasis on the use of the nursing process to assess and integrate therapeutic communication techniques, learning/teaching, psychosocial, diversity/cultural, spiritual, nutritional, pharmacological, legal and ethical aspects. Introduction to adaptive and maladaptive, psychosocial and physiological responses related to commonly occurring psychological disorders as seen in the various healthcare settings. Integration QSEN competencies of patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics.

Prerequisites: Program Admission.

Credits: 1

Lecture: 1

Lab: 0

NSG 145 - Pharmacology for Nursing I

Description: Introduces principles of pharmacotherapeutics, pharmacodynamics, and pharmacokinetics, including drug actions, utilizing the Quality and Safety Education in Nursing competencies and nursing process to explore pharmacologic aspects of patient care. Examines national standards for safety in pharmacologic therapy. Introduces dosage calculation.

Prerequisites: Program Admission.

Credits: 1

Lecture: 1

Lab: 0

NSG 151 - Nursing Theory II

Description: Concepts of nursing care for clients with commonly occurring alternations in health, utilizing the nursing process to apply and analyze previously learned concepts. In addition to assessment, planning, and nursing diagnosis, with emphasis on implementation. Incorporates a holistic approach to assessment. Integrates the competencies of nursing knowledge to include patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics.

Prerequisites: NSG 140, NSG 142, NSG 143, NSG 144, NSG 145

Credits: 3

Lecture: 3

Lab: 0

NSG 152 - Application of Nursing Theory II

Description: Beginning clinical experience requiring the integration of previously learned clinical concepts. Applies therapeutic interventions using the nursing process to adapt patient centered care to meet the needs of diverse clients within the healthcare system. Clinical practicum occurs in well-defined settings and integrates the competencies of nursing practice to include patient centered care, informatics, teamwork and collaboration, safety, quality improvement and evidence-based practice.

Prerequisites: NSG 140, NSG 142, NSG 143, NSG 144, and NSG 145

Credits: 2

Lecture: 0

Lab: 4

NSG 153 - Development of Nursing Practice II

Description: Applies theory that directs nursing skills and the development of nursing practice. Uses the nursing process to apply theory and the implementation of appropriate nursing interventions. Intermediate to advanced nursing skills are developed.

Prerequisites: NSG 140, NSG 142, NSG 143, NSG 144, and NSG 145

Credits: 2

Lecture: 1

Lab: 3

NSG 154 - Maternal/Child Nursing Theory

Description: Health promotion in the context of the family with a focus on the mother and child. Includes concepts of nursing care for the developing family from preconception to perinatal and postpartum care of the mother and neonate. Encompasses normal and high-risk reproductive issues, women's health, and developmental care of the child from infant through adolescence. Integrates the competencies of nursing knowledge to include patient-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, safety, quality improvement, and evidence-based practice.

Prerequisites: NSG 140, NSG 142, NSG 143, NSG 144, NSG 145

Credits: 2

Lecture: 2

Lab: 0

NSG 155 - Pharmacology for Nursing II

Description: Examination of principles of pharmacotherapeutics, pharmacodynamics, and pharmacokinetic properties of commonly prescribed drugs in each of the major drug classifications. Integrates the Quality and Safety Education in Nursing competencies and nursing process to pharmacologic aspects of effective care for individual clients with complex disease condition along the health/illness continuum. Reinforces national standards for safety in pharmacologic therapy. Introduces complex dosage calculations. In-depth examination of selected medication classifications with patient safety and critical thinking presented.

Prerequisites: NSG 140, NSG 142, NSG 143, NSG 144, and NSG 145

Credits: 2

Lecture: 2

Lab: 0

NSG 241 - Nursing Theory III

Description: Concepts of nursing care for clients with commonly occurring alterations in health, utilizing the nursing process to apply and analyze previously learned concepts. In addition to assessment, planning and nursing diagnosis, emphasis is on implementation. Incorporates a holistic approach to assessment of patients. Integrates the competencies of nursing knowledge to include patient-centered care, informatics and technology, teamwork and collaboration, safety, quality improvement and evidence-based practice.

Prerequisites: NSG 151, NSG 152, NSG 153, NSG 155, BIO 205

Credits: 5
Lecture: 5
Lab: 0

NSG 242 - Application of Nursing Theory III

Description: An intermediate clinical course with application of theoretical concepts of wellness and illness; emphasis on nursing skills and application of nursing process in meeting the needs of diverse clients. Clinical practicum occurs in well-defined settings and integrates the competencies of nursing practice to include; patient centered care, professionalism, communication, teamwork and collaboration, safety, quality, informatics and evidence-based practice. Clinical group pre- and post-conference discussions occur with application of theoretical concepts.

Prerequisites: NSG 151, NSG 152, NSG 153, NSG 154, NSG 155, and BIO 205

Credits: 3
Lecture: 0
Lab: 6

NSG 260 - Mental Health Nursing Theory II

Description: Concepts of nursing care for clients with maladaptive psychosocial and physiological responses related to commonly occurring psychiatric disorders. Emphasis on the use of the nursing process to apply and analyze previously learned concepts related to psychiatric disorders. Integration of competencies of nursing knowledge to include patient centered care, teamwork and collaboration, safety, evidence-based practice, quality management and informatics to provide professional safe care.

Prerequisites: NSG 151, NSG 152, NSG 153, NSG 154, NSG 155, BIO 205

Credits: 2
Lecture: 2
Lab: 0

NSG 270 - Nursing Theory IV

Description: Applies concepts of nursing care for clients with critical alterations in health. Emphasis is on high-risk and multi-system problems including concepts of acute medical-surgical and an introduction to critical care nursing. Uses the nursing process to analyze and synthesize previously learned concepts. Integrates the QSEN competencies to include patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics.

Prerequisites: NSG 241, NSG 242, NSG 260

Credits: 3
Lecture: 3
Lab: 0

NSG 272 - Application of Nursing Theory IV

Description: Analysis and synthesis of theory content to selected patients in acute care settings (including but not limited to critical care areas, medical/surgical/telemetry units, emergency department, obstetrics and pediatric units). Students are paired with a registered nurse preceptor while completing their capstone clinical experience in order to facilitate transition to practice. Integrates the QSEN competencies to include patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety and informatics.

Prerequisites: NSG 241, NSG 242, NSG 260

Credits: 4.5

Lecture: 0

Lab: 9

NSG 280 - Professional Nursing Concepts

Description: Concepts associated with professional comportment and the meaning of the identity of nursing as a profession. Skills and techniques for entering the healthcare profession as a registered nurse. Consideration given to current trends in the job market. Includes career search, employment considerations, and primary aspects of obtaining employment. Techniques to generate a resume and cover letter, and prepare for the interviewing process. Develops interviewing skills. Provides an introduction to principles of management and leadership. Explores competencies necessary to succeed in a nursing leadership role in various healthcare settings. Incorporates and integrates the competencies of nursing knowledge to include patient centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics.

Prerequisites: NSG 241, NSG 242, NSG 260

Credits: 2

Lecture: 2

Lab: 0

NSG 296 - Internship: Nursing

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

NSG 299 - Independent Study Nursing

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

NSG 310 - Transition and Concepts of Professional Nursing

Description: Builds on prior learning and skills to facilitate the transition to professional nursing. Philosophical perspectives, theories and standards are applied to professional nursing practice. Factors influencing nursing and health care are considered.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

NSG 320 - Nursing Practice in a Multicultural Society

Description: Exploration of the ethics and human rights issues related to disparities in equality of financial, educational, environmental, and political resources across the United States and the globe. The role of the professional nurse beyond your community is discussed.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

NSG 330 - Advanced Assessment and Health Promotion

Description: Building on prior learning, focus is on assessment of families, groups, and communities. The emphasis will be on health promotion across the lifespan.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

NSG 340 - Nursing Informatics

Description: Includes an overview of nursing informatics to improve communication, management of health care and optimal outcomes. Nursing's role and ethical considerations with informatics will be discussed.

Prerequisites: Program Admission.

Credits: 1.5

Lecture: 1.5

Lab: 0

NSG 350 - Nursing Research and Evidence Translation

Description: Overview of the research process and utilization of evidence for optimal practice. Discussion of strategies to evaluate research for application will be discussed as a means of evidence translation.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

NSG 410 - Issues in Professional Practice

Description: Building upon the RN to BSN student's practice, explores current political, economic, cultural, and social issues related to practice within the evolving health care system. The role of the nurse leader, advocating for quality within this changing environment will be discussed.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

NSG 420 - Population-Based Nursing in the Community

Description: This course introduces the concepts and principles of community and public health nursing. Emphasis is placed on community health measures that preserve, promote and maintain the health of populations. this course is designed to assess and create a comprehensive teaching plan for a specific population within the community.

Prerequisites: Program Admission.

Credits: 4

Lecture: 4

NSG 430 - Aging and End of Life

Description: Overview of the ethical dilemmas encountered in health care with an aging population. Discussion will focus on complex situations encountered by interprofessional teams related to end-of-life care.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

NSG 440 - Global Health: Ethics and Human Rights

Description: Exploration of the ethics and human rights issues related to disparities in equality of financial, educational, environmental, and political resources across the United States and the globe. The role of the professional nurse beyond your community is discussed.

Prerequisites: Program Admission.

Credits: 3
Lecture: 3
Lab: 0

NSG 450 - Nursing Leadership

Description: Builds on prior learning and experience to explore transformational leadership facilitating healthy work environments and providing optimal patient care by developing a leadership project in evidence-based practice or a quality improvement project.

Prerequisites: Program Admission.

Credits: 4
Lecture: 4

Nutrition

NTR 135 - Human Nutrition

Description: Principles of human nutrition including nutrient sources and physiological needs throughout the life cycle. Emphasis on role of nutrition in health and disease.

Prerequisites: Reading Proficiency.

Credits: 3
Lecture: 3
Lab: 0

NTR 145 - Food and Culture

Description: Examination of food in the context of culture. Includes historical, religious, and socio-cultural influences on the development of cuisine, meal patterns, eating customs, cooking methods, and nutritional status of various ethnic groups. Evaluation of traditional and contemporary food habits, beliefs and attitudes of global populations; selection, preparation and serving of foods from diverse cultures, and health and social impact of dietary changes. Exploration of the impact of politics, socioeconomics, and conflict on global, regional and local food systems.

Prerequisites: Reading Proficiency.

General Education Competency: Diversity

Credits: 3
Lecture: 3
Lab: 0

NTR 296 - Internship: Human Nutrition

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

NTR 299 - Independent Study Human Nutrition

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Physical Education

PHE 105 - Fitness Workshop

Description: A group fitness class emphasizing one or more of the following: cardio fitness, resistance training, core/stability and flexibility exercises. S/U grading only.

Credits: .5

Lecture: 0

Lab: 1

PHE 107 - Water Fitness Workshop:

Description: A pool-based exercise class using a variety of water equipment for a non-impact full body workout. S/U grading only.

Credits: .5

Lecture: 0

Lab: 1

PHE 110L - NIA

Description: Neuromuscular Integrative Action (NIA) is a sensory-based movement practice that blends the dynamic power of the martial arts, the creative expression of the dance arts, and the inner awareness of the healing arts.

Credits: 1

Lecture: 0

Lab: 2

PHE 130A - Fitness, Machine and Free Weight Training

Description: Introduction to cardiorespiratory fitness, strength training exercises, and flexibility training.

Credits: 1

Lab: 2

PHE 140J - Pickleball

Description: Beginning to intermediate rules, skills and strategies for Pickleball, a paddleball sport that combines elements of badminton, table tennis, and tennis. Two or four players use solid paddles made of wood or composite materials to hit a perforated polymer ball over a net.

Credits: 1

Lecture: 0

Lab: 2

PHE 200F - The Path of Yoga

Description: Introduction to Yoga history and philosophy. Practice of Hatha Yoga and meditation.

Credits: 3

Lecture: 2

Lab: 2

PHE 228 - Lifeguard Training

Description: Lifeguarding techniques. Meets American Red Cross standards.

Credits: 2

Lecture: 1

Lab: 2

PHE 296 - Internship: Physical Education

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

PHE 299 - Independent Study Physical Education

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Philosophy

PHI 101 - Introduction to Philosophy

Description: Introduction to questions in the major areas of philosophy, including the nature of reality, knowledge, values, and argumentation. Some questions may include: What is a person? What is the mind? Is there an afterlife? Do we have souls? How do you know that your beliefs are true? Does God exist? How can you determine the right way to live? What is the right way to argue? What is happiness? What is the meaning of life? Includes the history and topics of philosophy, critical thinking and the intellectual tools to study these topics in greater depth.

Prerequisites: Reading Proficiency

General Education Competency: Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 103 - Introduction to Formal Logic

Description: Historical and formal study of logical concepts, with emphasis on problem solving through symbolic manipulation. Examination of meaning, definition, induction, deduction, fallacies, validity, truth, and the structure and classification of arguments. Includes a basic introduction to formal techniques for evaluating deductive arguments and scientific reasoning, including syllogistic, propositional, and predicate logic.

General Education Competency: Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 105 - Introduction to Ethics

Description: Examination of the nature of morality and specific moral issues. Questions explored include: What is the foundation of morality? What makes actions either right or wrong? What does it mean to be a good person? What gives life meaning? Why should we try to do the right thing? Topics include: abortion, war, euthanasia, animal rights, happiness, the meaning of life, environmental rights, poverty, sex, feminism, racism, free speech, torture, and the law.

Prerequisites: Reading Proficiency

General Education Competency: Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 110 - Critical Thinking in the Digital Age

Description: Introductory study of critical thinking and logic, with emphasis on argumentation, rhetoric, and problem-solving. Examination of language, meaning, definition, fallacies, and arguments as they occur in academic and real-world settings (with an emphasis on online communication, media, and digital environments). Application of logic and critical thinking strategies to contemporary issues and practical problem solving.

Prerequisites: Reading Proficiency

Credits: 3

Lecture: 3

Lab: 0

PHI 122 - Science and Religion

Description: Exploration of science, religion, and philosophy through historic and contemporary times. Examination of the goals and methods of these disciplines with special emphasis on their interactions and mutual influences. Accent on the Western traditions, with references to others as appropriate.

Prerequisites: Reading Proficiency

General Education Competency: Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 204 - Medical Ethics

Description: Examination of fundamental ethical questions that arise in real situations that health professionals, patients, and community members are likely to face. Students will develop a framework for ethical decision-making in healthcare; learn how to identify relevant ethical principles; and analyze real life ethical dilemmas. Questions asked include: What are the source, meaning, and justification of ethical claims? What kinds of acts are right? How do rules apply to specific situations? What ought to be done in specific situations? Issues that may be discussed include abortion, mental health, human experimentation, treatment refusal, organ transplants, end of life care, euthanasia, and healthcare.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 210 - Environmental Ethics

Description: The history of environmental ethics and philosophical positions dealing with our moral relationship to the natural world. Examination of these relationships by looking at current ethical theories. Topics may include: animal rights, conservation, economic approaches to the environment, access to natural resources, ecofeminism, ecoracism, environmental justice and pollution, climate change, technology, and activism. Questions students may

explore include: How should humans relate to the natural world? Do we have moral obligations toward non-human animals and other parts of nature? What do we owe other human beings, including future generations?

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 220 - Happiness and the Meaning of Life

Description: Examination of answers to questions about the nature of happiness, including how philosophers have and continue to discuss these issues. Students will consider the relationship between happiness and a meaningful life. Questions explored include: What is happiness or the meaning of life? What is the relationship between happiness, pleasure, and the meaning of life? Can someone tell you how to be happy or how to live meaningfully?

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 232 - Business Ethics

Description: Investigation of ethical problems and solutions in contemporary business practice. Covers ethical theories and how to correctly use ethical decision-making frameworks to resolve issues dealing with personal, social, environmental, and corporate responsibility. Topics include personal morality in profit-oriented enterprises; codes of ethics; obligations to employees and other stakeholders; truth in advertising; whistleblowing and company loyalty; self and government regulation; the logic and future of capitalism; the changing responsibilities of the manager; and the need for awareness of social justice in management and business activities.

Prerequisites: Reading Proficiency.

General Education Competency: Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 244 - Existentialism

Description: The nature of human existence and our abilities to live meaningful and authentic lives. Emphasis on French, German, Danish, and Russian authors who maintain that life has no inherent meaning that humans can discover, but that we must determine meaning for ourselves. Topics may include: the human condition, the meaning of life, death, self-deception, authenticity, integrity and responsibility, guilt and shame, and love and sexuality.

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity; Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PHI 296 - Internship: Philosophy

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

PHI 299 - Independent Study Philosophy

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Physics

PHY 100 - Introduction to Astronomy

Description: Cycles of the sky, astronomical observations, history of astronomy, gravitation, light, optical instruments, stellar evolution and classification, galaxies, cosmological theories, survey of the solar system, and life in the universe. Preparedness Recommendations: one year of high school algebra or passing grade in MAT 092 or satisfactory score on mathematics skills assessment.

Prerequisites: Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

PHY 111 - General Physics I

Description: Topics include: time and motion studies, forces on stationary and moving objects, waves and sound, heat and energy. Designed for architecture, forestry, pre-med, pre-vet, pharmacy and education students.

Prerequisites: MAT 187 (or MAT 182 and MAT 183), or satisfactory score on mathematics skills assessment. Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

PHY 112 - General Physics II

Description: Electricity, magnetism, light, physical optics, geometric optics, and atomic structure. Designed for pre-med, pre-vet, and pharmacy students.

Prerequisites: PHY 111. Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 4

Lecture: 3

Lab: 3

PHY 150 - Physics for Scientists and Engineers I

Description: Principles of mechanics. Kinematics, dynamics, systems of particles, equilibrium, fluids, gravitation, and oscillations, with calculus applications. For engineering and physics majors.

Prerequisites: MAT 220. One year of high school physics or PHY 111/PHY 112 is strongly recommended. Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 5

Lecture: 4

Lab: 3

PHY 151 - Physics for Scientists and Engineers II

Description: Waves and sound, electromagnetism, circuits, electromagnetic waves, and Maxwell's equations, with calculus applications. For engineering and physics majors.

Prerequisites: MAT 230 and PHY 150. Reading Proficiency.

General Education Competency: Scientific Literacy

Credits: 5

Lecture: 4

Lab: 3

PHY 196 - Directed Research: Physics

Description: Faculty or mentor directed student research in an area of current scientific investigation culminating in a final report, paper, or presentation. Students will work in the lab or in the field to gain the intellectual, technical, and practical skills necessary to further the knowledge base in an area of scientific investigation with the objective of contributing to the professional body of scientific knowledge.

Credits: 1-3

Lecture: Varies

Lab: Varies

PHY 296 - Internship: Physics

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

PHY 299 - Independent Study Physics

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Political Science

POS 100 - Introduction to Political Science

Description: Survey of the basic principles, terminology, and methods of political science with an analysis of contemporary issues. Discussion of the issues and processes involved in political activity utilizing a comparative perspective of different countries. Introduces basic concepts, terms, theories and important figures.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

POS 110 - American National Government

Description: Introduction to the historical backgrounds, governing principles, and institutions of the United States national government. Topics include the basic concepts, institutions and substance of American politics: separation of powers, representational democracy, rule of law, equality under law, federalism, public opinion interest groups and the

election process. Exploration of the cultural and racial environment, impact of gender, class and immigration status, the rights of American Indians/Native peoples and Tribal Nations and the expansion of civil liberties for all Americans.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

POS 120 - World Politics

Description: Introduction to the principles and issues relating to the study of international relations and world politics. Evaluation of the political, economic, national, and transnational rationale for international interactions. Examination of key issues in world politics, including power, war, hegemony, international institutions, trade, and environmental issues.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

Psychology

PSY 101 - Introductory Psychology

Description: Introduction to psychology through such topics as the scientific method in psychology, survey of different fields in psychology, heredity and environment, intelligence, emotions, motivation, nervous system, and learning processes.

General Education Competency: Critical Thinking

Credits: 3

Lecture: 3

Lab: 0

PSY 175 - Counseling Skills

Description: Principles and practices which underlie the effective and ethical use of the helping relationship in human services.

Credits: 3

Lecture: 3

Lab: 0

PSY 176 - Coaching for Managers

Description: Introduction to the basic skills and application of coaching to management.

Credits: 1

Lecture: 1

Lab: 0

PSY 210 - Brain and Behavior

Description: Investigation of the human brain and how it affects our behavior. Includes optical illusions, hallucinations, phantom limb, biological drives and the ability to remember and forget. Observable behavior in mental disorders such as schizophrenia and anxiety, the chemical processes in the brain, and the effects of illegal and prescription drugs on the human body and its various systems.

Prerequisites: PSY 101

Credits: 3

Lecture: 3

Lab: 0

PSY 230 - Introduction to Statistics in the Social and Behavioral Sciences.

Description: Basic concepts of statistical analysis and design in social and behavioral science research. This course is crosslisted with SOC 230.

Prerequisites: MAT 142 or MAT 152 or satisfactory score on the mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 3

Lecture: 3

Lab: 0

PSY 234 - Child Development

Description: Exploration of children's development from conception through adolescence, assuming a transactional approach to understanding development focusing on family relationships, brain development, social/emotional development, and the role of culture in child development. Examination of major developmental themes and theories of child development utilizing scientific methods of inquiry and viewed through a cultural lens. Risk and protective factors are analyzed with respect to the interplay of attachment, brain development, and social-emotional development. Developmental periods include prenatal, infancy, toddlerhood, preschool years, middle childhood, and adolescence, with an examination of biological influences, cognition, behavioral characteristics, social interaction, and cultural resources typified at each developmental period. This course requires 5 face-to-face observation hours in early childhood and elementary settings. This course is cross-listed with ECE 234.

Credits: 3

Lecture: 3

Lab: 0

PSY 238 - Psychology of Play

Description: Importance of play on cognitive, physical, social, and emotional development throughout the lifespan. Exploration of the benefits of play with respect to fostering creativity, personal expression, and a sense of well being. Appreciation of play activities as a reflection of culture, gender, and social class.

Credits: 3
Lecture: 3
Lab: 0

PSY 240 - Personality Development

Description: Typical personality development with emphasis on the analysis of classic and contemporary theories of personality structure and dynamics. Examination of psychological traits and mechanisms with respect to the dispositional, biological, intrapsychic, cognitive-experiential, social and cultural, and adjustment domains.

Prerequisites: PSY 101

Credits: 3
Lecture: 3
Lab: 0

PSY 241 - Substance Abuse

Description: Study of the physical, social, and psychological effects of substance abuse. The effects of substance abuse on the criminal justice system.

Credits: 3
Lecture: 3
Lab: 0

PSY 245 - Human Growth and Development

Description: Study of physical, intellectual, moral, emotional, personality, and social development of the human being, beginning with conception and continuing through childhood, adolescence, adulthood, old age, and dying. Emphasis on quantitative and qualitative ways people change throughout the life span and factors which contribute to human diversity as well as to individual uniqueness. Research methods appropriate to the study of human development are also considered.

General Education Competency: Written Communication

Credits: 3
Lecture: 3
Lab: 0

PSY 250 - Social Psychology

Description: The study of how our thoughts, feelings, and actions are affected by our social environment. Emphasis on prejudice, conformity, altruism, interpersonal interaction, and the influence of the media.

Prerequisites: PSY 101

Credits: 3
Lecture: 3
Lab: 0

PSY 266 - Abnormal Psychology

Description: Introduction to psychopathology, the scientific study of mental disorders. Assumes an integrative approach incorporating the contributions of genetic, neuroscience, behavioral, cognitive, emotions, cultural, social, and interpersonal factors in the exploration of the dimensions of psychopathology. Survey of symptoms, classification, prevalence, etiology, and treatment of the DSM-5 mental disorders including anxiety, mood, somatoform, dissociative, eating, sexual dysfunction, personality, schizophrenia, neurodevelopmental, and neurocognitive disorders.

Prerequisites: PSY 101.

Credits: 3

Lecture: 3

Lab: 0

PSY 277 - Human Sexuality

Description: Introduction to the physical, social, cognitive and cultural issues to human sexuality, including sexual health, gender, orientations, pathology and treatments. Examination of the facts and myths, current literature, and changing norms regarding human sexuality.

Prerequisites: ANT 102 or PSY 101 or PSY 245 or SOC 101

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

PSY 290 - Research Methods

Description: Planning, execution, analysis, and written reporting of psychological research. Surveys the literature, procedures, and instruments in representative areas of psychological research.

Prerequisites: PSY 101

Credits: 4

Lecture: 4

Lab: 0

PSY 296 - Internship: Psychology

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies
Lab: Varies

PSY 299 - Independent Study Psychology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Radiologic Technology

RAD 100 - Introduction to Medical Imaging

Description: Foundations of medical imaging and the practitioner's role in the health care delivery system. Includes an examination of the health care environment, radiography education, and related organizational topics. Ethical and legal considerations, and an introduction to patient care principles.

Prerequisites: Program Admission. BIO 160 (may be taken concurrently).

Credits: 2
Lecture: 2
Lab: 0

RAD 101 - Limited Radiographic Positioning I

Description: Fundamentals of radiographic positioning for the upper and lower extremities, shoulder girdle, and chest.

Prerequisites: Program Admission. BIO 160 or BIO 201 (may be taken concurrently).

Credits: 3
Lecture: 3
Lab: 0

RAD 102 - Limited Radiographic Positioning Lab I

Description: Application of radiographic positioning for the upper and lower extremities, shoulder girdle, and chest.

Prerequisites: Program Admission. BIO 160 or BIO 201 (may be taken concurrently).

Credits: 2
Lecture: 0
Lab: 6

RAD 103 - Radiographic Positioning II Advanced Placement

Description: Fundamentals of radiographic positioning of the vertebral column, cranium, and bony thorax including pelvis, pelvic girdle, and abdomen. Emphasis on contrast studies of the urinary and digestive systems, and imaging during trauma and surgery. Includes procedural considerations for age-specific imaging.

Credits: 3

Lecture: 3

Lab: 0

RAD 104 - Radiographic Positioning Lab II Advanced Placement

Description: Fundamentals of radiographic positioning of the vertebral column, cranium, and bony thorax. Including pelvis, pelvic girdle, and abdomen. Emphasis on contrast studies of urinary and digestive systems, and imaging during trauma and surgery. Includes procedural considerations for arthrography, myelography, venography, and age-specific imaging.

Credits: 2

Lecture: 0

Lab: 6

RAD 111 - Radiographic Positioning I

Description: Fundamentals of radiographic positioning for the upper and lower extremities, shoulder girdle, chest, pelvis, pelvic girdle, and abdomen.

Prerequisites: Program Admission.

Credits: 3

Lecture: 3

Lab: 0

RAD 112 - Radiographic Positioning Lab I

Description: Application of radiographic positioning for the upper and lower extremities, shoulder girdle, chest, pelvis, pelvic girdle, and abdomen.

Prerequisites: Program Admission.

Credits: 2

Lecture: 0

Lab: 6

RAD 135 - Radiation Physics and Equipment

Description: Radiation production and its characteristics, including the fundamentals of atomic structure and concepts related to radiation as well as photon interactions with matter. Additionally, the basics of imaging systems and quality control in radiography.

Credits: 3

Lecture: 3

Lab: 0

RAD 141 - Radiographic Positioning II

Description: Fundamentals of radiographic positioning of the vertebral column, cranium, and bony thorax. Emphasis on contrast studies of the urinary and digestive systems, and imaging during trauma and surgery. Includes procedural considerations for age-specific imaging.

Credits: 3

Lecture: 3

Lab: 0

RAD 142 - Radiographic Positioning Lab II

Description: Fundamentals of radiographic positioning of the vertebral column, cranium, and bony thorax. Emphasis on contrast studies of urinary and digestive systems, and imaging during trauma and surgery. Includes procedural considerations for arthrography, myelography, venography, and age-specific imaging.

Credits: 2

Lecture: 0

Lab: 6

RAD 158 - Radiographic Image Production

Description: Essential knowledge about the role of a radiologic technologist in image production. Fundamentals of atomic structure, terminology, and the key factors that influence the image production process. Inclusive of technique chart development, quality assurance, and maintenance.

Credits: 2

Lecture: 2

Lab: 0

RAD 161 - Radiology Clinical Education I

Description: Supervised clinical assignments follow a structured approach involving observation, assistance, and the achievement of specific radiographic competency benchmarks over the course of a semester. These experiences are designed to help students develop essential skills in patient care and radiographic positioning through a competency-based approach.

Credits: 3

Lecture: 0

Lab: 9

RAD 162 - Radiology Clinical Education II

Description: Supervised clinical assignments following a structured approach involving observation, assistance, and the achievement of specific radiographic competency benchmarks over the course of a semester. These experiences are

designed to help students develop essential skills in patient care and radiographic positioning through a competency-based approach.

Credits: 4
Lecture: 0
Lab: 12

RAD 170 - Radiology Patient Care and Pharmacology

Description: Concepts of patient care with consideration for the physical and psychological needs of the patient and family. Includes the practice in the application of routine and emergency patient care procedures, infection control procedures, venipuncture, patient education, as well as the basic concepts of pharmacology within radiology.

Prerequisites: Program Admission.

Credits: 2
Lecture: 2
Lab: 0

RAD 175 - Radiation Biology and Protection

Description: Principles of the interaction of ionizing radiation and biological systems. Includes concepts of radiation protection.

Credits: 2
Lecture: 2
Lab: 0

RAD 185 - Radiographic Image Analysis

Description: Foundations for the analysis of radiographic images. Encompasses the significance of maintaining optimal imaging standards, employing problem-solving techniques for image assessment, and understanding the factors that influence image quality.

Credits: 2
Lecture: 2
Lab: 0

RAD 201 - Radiology Clinical Education III

Description: Supervised clinical assignments follow a structured approach involving observation, assistance, and the achievement of specific radiographic competency benchmarks over the course of a semester. These experiences are designed to help students develop essential skills in patient care and radiographic positioning through a competency-based approach.

Credits: 4
Lecture: 0
Lab: 12

RAD 202 - Radiology Clinical Education IV

Description: Supervised clinical assignments following a structured approach involving observation, assistance, and the achievement of specific radiographic competency benchmarks over the course of a semester. These experiences are designed to help students develop essential skills in patient care and radiographic positioning through a competency-based approach.

Credits: 4

Lecture: 0

Lab: 12

RAD 215 - Advanced Imaging Systems

Description: Overview of the diverse fields of medical imaging. Provides the opportunity to observe and assist in various disciplines within the radiology department at the assigned clinical placement.

Credits: 2

Lecture: 2

Lab: 0

RAD 250 - Radiographic Pathology

Description: Concepts of disease and the etiology of selected pathologic conditions. Emphasis on the radiographic appearance of various diseases and the influence of pathologic conditions on exposure factor selection.

Credits: 2

Lecture: 2

Lab: 0

RAD 255 - Radiology Registry Prep and Professional Development

Description: Comprehensive review of standard subject materials to prepare students for the American Registry of Radiologic Technologists (ARRT) Examination. Includes guidance on resume building, honing interview skills, and exploring opportunities for continuing education.

Credits: 3

Lecture: 3

Lab: 0

RAD 299 - Independent Study Radiologic Technology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Recreation Management

REC 113 - Backpacking

Description: Techniques for efficient backcountry hiking. Skills for the beginning backpacker; includes packing and travel tactics, safety and low impact camping. Must possess adequate physical abilities for backcountry travel with a backpack. Overnight trips required.

Credits: 1

Lab: 2

REC 140 - Aboriginal Living Skills

Description: Introduction to Southwestern primitive skills. Creating fire with sticks, making and using basic stone tools, building primitive shelters, using plant fibers for rope and other utilitarian utensils. All students should be prepared for light hiking with a backpack.

Credits: 2

Lecture: 1

Lab: 2

REC 142 - Outdoor Survival Skills

Description: Adapting to outdoor emergencies using modern fire lighting techniques, natural shelter construction, locating and disinfecting water and signaling for rescue.

Credits: 2

Lecture: 1

Lab: 2

REC 145 - Wilderness Advanced First Aid

Description: Principles and skills to make critical first aid and evacuation decisions and take appropriate action in remote locations where medical assistance is more than one hour away.

Credits: 2

Lecture: 1

Lab: 2

Religious Studies

REL 101 - Introduction to World Religions

Description: Introduction to the history of religious traditions of the world, including Buddhism, Christianity, Hinduism, Islam, Judaism, Confucianism, Daoism, as well as indigenous traditions. Exploration of the diversity of religions and religious experiences across the globe. Essential features of each tradition and how different religions have responded to basic human needs, including the cultural contexts in which they developed.

Prerequisites: Reading Proficiency.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

REL 200 - Asian Mysticism

Description: Fundamental theories of Indian, Chinese, and Japanese metaphysics, epistemology, ethics, and aesthetics. Exploration of the mystical traditions and spiritual practices of yoga and meditation in the Asian traditions, including Hinduism, Buddhism, Confucianism, and Taoism.

Prerequisites: ENG 101 or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

REL 203 - Native Religions of the World

Description: Examination of the kinds of religious experience found among native aboriginal peoples (often called "tribal" or "indigenous" peoples). Analysis of the religious traditions of both modern and archaic native peoples and the relationship of their religious experience to other forms of experience (social, economic, political, and cultural).

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

REL 205 - Life, Sex, and Death

Description: Development of the vocabulary and conceptual frameworks for thinking and discussing life, sex, and death, arguably the most significant and misunderstood aspects of human experience, by looking to religion, philosophy, film, anthropology, and literature. Examination of the ways that humans have understood the transformative experiences of birth, sexual maturity, death, and the passing of generations as discussed by the world traditions.

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency. Due to the course's subject matter, students must be at least 18 years of age to take course.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

REL 207 - Death and Dying

Description: Introduction to the academic study of issues surrounding religion, culture, death, dying, and bereavement. Engages death and dying from the perspective of various religious traditions, both in terms of doctrinal belief and lived practice. Examines death practices in various global locations. Explores personal narratives of death and grief in contemporary society and asks questions about what makes life worth living. Topics may include: the social impact of COVID-19, physician-assisted dying, shifting funerary practices, and the scientific pursuit of immortality.

Credits: 3

Lecture: 3

Lab: 0

REL 261 - Buddhism

Description: An introductory survey of the Buddhist tradition, emphasizing its origin and development in Asia. Surveys doctrinal developments including the Theravāda, Mahāyāna, and Vajrayāna paths, beginning with the legend of the Buddha and the formation of the monastic community.

Credits: 3

Lecture: 3

Lab: 0

REL 270 - Christianity

Description: Introduction to the history and complexities of Christianity. Emphasis on what underlies the enduring fabric of Christianity, the tensions straining it today, and its relationship with modernity.

Credits: 3

Lecture: 3

Lab: 0

REL 273 - Judaism

Description: Dimensions and concerns of Jewish civilization historically and in contemporary times. Continuities and discontinuities, secular and religious expressions of Jewish culture, concepts, and ideals; sense of human place, purpose, communal and personal life; influence of Jewish thought on other religious and secular cultures; modern concepts and challenges.

Prerequisites: ENG 101 or ENG 101A or ENG 103. Reading Proficiency.

General Education Competency: Written Communication; Diversity

Credits: 3

Lecture: 3

Lab: 0

REL 299 - Independent Study Religious Studies

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Sociology

SOC 101 - Introduction to Sociology

Description: Study of human behavior from the sociological perspective. Areas of emphasis include society, culture, social structure, social institutions, socialization, and forms of social stratification.

General Education Competency: Diversity

Credits: 3
Lecture: 3
Lab: 0

SOC 140 - Sociology of Relationships and Family

Description: Examination of macro and micro factors affecting relationships and families. Exploration of elements of diversity (gender, race/ethnicity, social class, education, culture, age cohort), relationship issues (communication, role expectations, conflict, dissolution, violence), family challenges (work/family balance, parenting, child care, stress, role conflict), and success strategies.

General Education Competency: Diversity

Credits: 3
Lecture: 3
Lab: 0

SOC 142 - Race and Ethnic Relations

Description: Contemporary racial and ethnic intergroup relations emphasizing cultural origins, developments, and problems of minority groups in the United States.

General Education Competency: Diversity

Credits: 3
Lecture: 3
Lab: 0

SOC 212 - Gender and Society

Description: Examine the ways society shapes and defines the positions and roles of both men and women. Emphasis on the sociological theories and research methods used to study how femininities and masculinities are constructed within the following social institutions: the family, education, work, healthcare, and the mass media.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

SOC 220 - Introduction to Social Work

Description: Survey of social work as a profession and social welfare as an institution. Social work: historical development, principles, philosophy, and practices.

Prerequisites: ANT 102 or PSY 101 or PSY 245 or SOC 101.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

SOC 230 - Introduction to Statistics in the Social and Behavioral Sciences

Description: Basic concepts of statistical analysis and design in social and behavioral science research. This course is crosslisted with PSY 230.

Prerequisites: MAT 142 or MAT 152 or satisfactory score on the mathematics skills assessment.

General Education Competency: Quantitative Literacy

Credits: 3

Lecture: 3

Lab: 0

SOC 250 - Social Problems

Description: A sociological exploration of selected social problems. Emphasis on social issues.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

SOC 296 - Internship: Sociology

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

SOC 299 - Independent Study Sociology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Spanish

SPA 098 - Spanish in Daily Life I

Description: Basic daily interactions with Spanish speakers in the US with a heightened emphasis on simple conversational language constructions and cultural components. Intended for the most novice of beginning Spanish students who have little or no formal training with Spanish and who want a very simple and basic conversationally-oriented introduction to the language. Includes functional language topics for interactions with Spanish speakers in real-world contexts and highlights entry-level cultural components of Spanish users living in the United States. Designed to improve cultural and linguistic competence and to build bilingualism and biculturalism through a conversational approach.

Credits: 1

Lecture: 1

Lab: 0

SPA 099 - Spanish in Daily Life II

Description: Maintains an active focus on basic daily interactions with Spanish speakers in the US, began in SPA098 and places even more emphasis on simple conversational language constructions and cultural components. Intended for the most novice of beginning Spanish students to practice their new conversationally oriented skills in a workshop-type learning environment with multiple opportunities for conversational language practice. Conversations will continue to focus on practical language use in real-world contexts, and to highlight entry-level cultural components of Spanish users living in the United States. Designed to provide improvement in cultural and linguistic competence, to build bilingualism and biculturalism through a conversational approach, and preparation for more systematic language study in SPA101.

Prerequisites: SPA 098 or SPA 101

Credits: 1

Lecture: 1

Lab: 0

SPA 101 - Beginning Spanish I

Description: Fundamentals of speaking, writing, listening, and reading of Spanish. Introduction to the culture of the Spanish-speaking world.

Credits: 4

Lecture: 4

Lab: 0

SPA 102 - Beginning Spanish II

Description: Development of speaking, writing, listening, and reading proficiency in Spanish at the novice mid/novice high level. Culture of the Spanish-speaking world.

Prerequisites: SPA 101 or SPA 132 or placement exam.

Credits: 4

Lecture: 4

Lab: 0

SPA 131 - Conversational Spanish I

Description: Fundamentals of speaking and listening skills in Spanish. Introduction to the culture of the Spanish-speaking world.

Credits: 3

Lecture: 3

Lab: 0

SPA 132 - Conversational Spanish II

Description: Development of speaking and listening skills in Spanish at the novice level. Culture of the Spanish-speaking world.

Prerequisites: SPA 101 or SPA 131.

Credits: 3

Lecture: 3

Lab: 0

SPA 135 - Introduction to Spanish Literature

Description: Basic panoramic view of Spanish language poetry and literature from selected countries and authors.

Prerequisites: SPA 102.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

SPA 201 - Intermediate Spanish I

Description: Development of speaking, writing, listening, and reading proficiency in Spanish at the novice high level. Culture of the Spanish-speaking world.

Prerequisites: SPA 102 or placement exam.

General Education Competency: Diversity

Credits: 4

Lecture: 4

Lab: 0

SPA 202 - Intermediate Spanish II

Description: Development of speaking, writing, listening, and reading proficiency in Spanish at the intermediate low level. Culture of the Spanish-speaking world.

Prerequisites: SPA 201 or placement exam.

General Education Competency: Diversity

Credits: 4

Lecture: 4

Lab: 0

SPA 245 - Hispanic Heritage in the Southwest: Culture and Language

Description: A panorama of Hispanic heritage in the Southwestern U.S. Encompasses an analysis of society, culture, language, tradition, and their contributions to the development of the rich diversity of the Southwestern region.

General Education Competency: Diversity

Credits: 3

Lecture: 3

Lab: 0

SPA 296 - Internship: Spanish

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

SPA 299 - Independent Study Spanish

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Student Success Skills

STU 100 - Computer Literacy

Description: Computer literacy skills necessary for success in any occupation. Includes disk and file management, keyboard shortcuts, customization and accessibility settings, disk and file management, operating systems, file extensions, device management, Internet browsing, source evaluation, e-mail, computer information security, and spreadsheet and word processing software.

Credits: 1

Lecture: 1

Lab: 0

STU 101 - Introduction to Student Success

Description: Academic and personal skills to promote a successful college experience.

Credits: 1

Lecture: 1

Lab: 0

STU 150 - College Success Skills

Description: Academic and personal skills to promote a successful college experience.

Credits: 3

Lecture: 3

Lab: 0

STU 198 - Student Workshop:

Description: Development of leadership, scholarship, fellowship and service through participation in various projects.

Credits: 1

Lecture: 1

Lab: 0

STU 296 - Internship: Student Development

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

STU 299 - Independent Study Life Management Skills

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

3-D Printing

TDP 101 - Introduction to 3-D Printing

Description: Introduction to 3-D additive manufacturing from an engineering technology perspective including the study of the history, processes, equipment, industrial and commercial uses, and current trends.

Credits: 3

Lecture: 2

Lab: 3

TDP 108 - 3-D Printer Operation and Maintenance

Description: An introduction to 3-D printing technologies, 3-D printing methods and printable materials as well as current and emerging applications of 3-D printing. Additional topics include assembly, calibration, use, maintenance and troubleshooting of 3-D printers.

Credits: 3

Lecture: 2

Lab: 2

TDP 201 - Slicing and Software for 3-D Printing

Description: Basic principles of 3-D printing and fabrication. Introduction to the design practices, tools, and techniques required to produce production-quality parts using multiple types of 3-D printers. Real-world fabrication methods and processes using industry-specific software.

Credits: 3

Lecture: 2

Lab: 3

TDP 210 - 3-D Model Optimization and Troubleshooting

Description: 3-D printing for fabricating three-dimensional solid objects from a digital design. Focused on studying the properties of 3-D printed specimens and modeling with varying processing conditions such as infill pattern, infill density and infill speed, and also with different printing materials.

Credits: 3

Lecture: 2

Lab: 3

TDP 250 - Industrial Projects for 3-D Printing

Description: Designing, modeling, and producing 3-D printed parts. Includes rapid prototyping to traditional large-scale production, operating scanners, processing scan data with software tools, and converting scan data to printable 3-D models. Exploration of the entire cycle from an original artifact to a scan-based model reproduction.

Credits: 4

Lecture: 3

Lab: 3

TDP 299 - Independent Study 3-D Printing

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Theater

THR 131 - Acting I

Description: Introduction to performance techniques with emphasis on movement and voice skills, and the performer's relationship to all parts of the play's production. Incorporates creative movement, character analysis, improvisation, stage arts, and the contribution of various types of theater and theatrical arts.

Credits: 3

Lecture: 2

Lab: 2

THR 132 - Acting II

Description: Study of performance techniques with emphasis on character development and analysis. Introduction to directing and technical theater as they influence development of acting skills.

Prerequisites: THR 131

Credits: 3

Lecture: 2

Lab: 2

THR 133 - Musical Theater I

Description: The study and performance of works from the musical theater repertory, including musical comedy, reviews, operetta and basic vocal and movement skills. Theater attendance and/or assistance in college productions required.

Prerequisites: MUS 134 (may be taken concurrently)

Credits: 3

Lecture: 2

Lab: 2

THR 134 - Musical Theater II

Description: Intermediate study and performance of works from the musical theatre repertory, including from the Golden Age of Musical Theater to current works on Broadway applying vocal and movement skills. Theater attendance and/or assistance in college productions required.

Prerequisites: MUS 134 (may be taken concurrently) and THR 133

Credits: 3

Lecture: 2

Lab: 2

THR 135 - Introduction to the Theater

Description: Development of theatre in Europe and America from ancient Greece to present. Integrated approach to theatre including playwriting, architecture, acting, production and criticism, particularly in historical settings.

Prerequisites: Reading Proficiency.

General Education Competency: Written Communication

Credits: 3

Lecture: 3

Lab: 0

THR 141 - Stagecraft

Description: Foundations of technical theater including theater throughout history, technical design, concept and collaboration. Development of skills used by theater technicians and craftspeople in areas of scenery, costume, lighting and sound.

Credits: 3

Lecture: 1

Lab: 4

THR 144 - Production Workshop Practicum: Costuming and Make-up

Description: Theater costume design and creation for production and theatrical performance.

Credits: 1
Lecture: 0
Lab: 3

THR 145 - Production Workshop Practicum: Props

Description: Theater prop design and creation for production and theatrical performance.

Credits: 1
Lecture: 0
Lab: 3

THR 146 - Production Workshop Practicum: Set Building and Painting

Description: Set design, painting, and creation for production and theatrical performance.

Credits: 1
Lecture: 0
Lab: 3

THR 147 - Production Workshop Practicum: Theater Production Crew

Description: Production support techniques for theatrical performance.

Credits: 1
Lecture: 0
Lab: 3

THR 150 - Theater Rehearsal and Performance

Description: Rehearsal and performance of a theatrical production. Students will be required to successfully pass an audition and be cast in a full-length musical production that will be performed for a public audience.

Credits: 1 - 3
Lecture: 0
Lab: 3 - 9

THR 151 - Scene Study for Actors

Description: Theory and practice of acting combined through the preparation and presentation of scenes from stage plays and screenplays. Scene work involving both solos and ensemble scenes.

Prerequisites: THR 131

Credits: 3
Lecture: 2
Lab: 2

THR 160 - Lighting for Stage and Media

Description: Introduction to the principles of lighting design for the theater and television and implementation of those designs. Emphasis on color grading, mood changes based on color, development of stage picture and how to light all angles of the subject in order to create a depth of field for the audience. Topics include an introduction to consoles and console development, design, and implementation. Current industry products will be used such as consoles, follow spots, MA3D-On PC, Vision, and Vectorworks may be used to enhance learning.

Credits: 3

Lecture: 1

Lab: 4

THR 161 - Sound Design for Stage and Media

Description: Introduction to the concept and implementation of sound design for different types of theatres (inside, outside, small, large), and different film locations. Topics include how to train one's ears to mix various shows, gain an understanding of signal flow, what speakers sound like, and recalling show practices using an analog mixer. Focus on sound instruments/boards, as well as in-ear technology, and the diverse types of microphones will be included. Cross listed with FMA 161.

Credits: 3

Lecture: 1

Lab: 4

THR 162 - Stagecraft Rigging and Safety

Description: Introduction to stage rigging safety protocols with training in rigging hardware including knots, ground rigging, hoists, trusses, and standard theater rigging procedures.

Credits: 3

Lecture: 1

Lab: 4

THR 164 - Theater Set and Props Building

Description: Introduction to hand skills and basic tools used for set and large props building, assembly and finishing techniques; applied to design principles. Guidance and hands-on experience using tools and measuring.

Credits: 3

Lecture: 1

Lab: 4

THR 165 - Script Analysis

Description: Focus on discovering creative, in-depth techniques of script analysis and realizing different methods for researching the script. Techniques will be applied to understanding the script as an actor, technician, director, designer, dramaturg or playwright.

Prerequisites: Reading Proficiency.

Credits: 3
Lecture: 1
Lab: 4

THR 218 - Directing I

Description: The art of theater direction for a stage play and the director's role.

Prerequisites: THR 132 and THR 220

Credits: 3
Lecture: 2
Lab: 2

THR 220 - Principles of Dramatic Analysis

Description: Play script analysis and production for interpreting a script for performance values and aesthetics. Critical analysis from the point of view of the director, actor, designer, or critic.

Prerequisites: THR 135 and THR 141

Credits: 3
Lecture: 3
Lab: 0

THR 231 - Acting the One-Act Play

Description: Performance techniques of the full One-Act Play. Emphasis on character development, character analysis, play analysis and acting within appropriate period styles. Introduction to producing, directing, technical theatre and acting the One-Act Play as they influence development of acting, directing, and production skills.

Prerequisites: THR 131

Credits: 3
Lecture: 2
Lab: 2

THR 296 - Internship: Theater

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies

Lab: Varies

THR 299 - Independent Study Theater

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Unmanned Aircraft System

UAS 100 - Introduction to UAS

Description: Fundamentals of Unmanned Aircraft Systems (UAS). Includes history, legislation, concept of operations, types of systems, and current applications.

Credits: 3

Lecture: 3

Lab: 0

UAS 103 - UAS Simulations

Description: Unmanned Aircraft System (UAS) concepts of operation using simulation. Includes map reading, data collection strategies and techniques, mission planning, live data dissemination, and end-of-mission report writing. Focus on aircrew coordination.

Credits: 3

Lecture: 3

Lab: 0

UAS 110 - UAS Fixed-Wing Systems

Description: Fundamentals of fixed-wing Unmanned Aircraft System (UAS) airframes and ground systems. Basic component operation and use of airframe systems, the power system, flight controls, payloads, and avionics. Includes hands-on assembly of UAS systems.

Credits: 4

Lecture: 2

Lab: 4

UAS 115 - UAS Multirotor Systems

Description: Fundamentals of multicopter Unmanned Aircraft System (UAS) airframes and ground systems. Basic component operation and use of airframe systems, power system, flight controls, payloads, and avionics. Includes hands-on assembly of UAS systems.

Credits: 4

Lecture: 2

Lab: 4

UAS 120 - UAS Sensing Systems

Description: Unmanned Aircraft System (UAS) sensor systems, principles of remote sensing, imagery analysis, and payload selection. Includes component operation and use of electro-optical, near-infrared, short-and long-wave infrared, Synthetic Aperture Radar (SAR), and Light Information Detection and Ranging (LIDAR) sensors. Introduction to the electromagnetic spectrum, target detection criteria, and sensor/lens/aircraft pairing.

Credits: 3

Lecture: 3

Lab: 0

UAS 132 - UAS Flight Operations

Description: Fundamentals of Unmanned Aircraft System (UAS) fixed-wing and multirotor flight. Designed for the rated Remote Pilot to safely operate fixed-wing and multirotor unmanned aircraft. Emphasis on semi-autonomous, autonomous, and manual flying techniques during takeoff, flight and landing.

Credits: 4

Lecture: 3

Lab: 2

UAS 215 - UAS Mapping Systems

Description: Unmanned Aircraft Systems (UAS) concepts of operation in creation of high-resolution photo maps for decision making. Includes theory of data collection, concepts in photogrammetry, flight planning, photomapping software operation, and operation of Geographical Information System (GIS) software. Interpretation and manipulation of visual imagery, multispectral imagery, and digital surface models.

Prerequisites: UAS 120.

Credits: 3

Lecture: 3

Lab: 0

UAS 250 - UAS Applications and Analytics

Description: Unmanned Aircraft Systems (UAS) applied operations to solve real-world problems. Evaluation of a real or simulated problem which will involve determining the appropriate UAS, payload, and operating procedures, collecting the required imagery/data, and evaluating the effectiveness of the proposed solution.

Prerequisites: UAS 120, UAS 215 (may be taken concurrently).

Credits: 3

Lecture: 3

Lab: 0

UAS 299 - Independent Study Unmanned Aircraft System

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Viticulture and Enology

VEN 100 - Introduction to Viticulture

Description: World history of grapes and their production. Emphasis on the varieties of grapes, grapevine biology and physiology, vineyard management, and harvest and post-harvest operations.

Credits: 3

Lecture: 2

Lab: 2

VEN 101 - Establishing a Vinifera Vineyard

Description: Introduction to the processes of establishing a vineyard. Emphasis on site selection, vine varieties, soil preparation, planting methods, vineyard layout, and equipment requirements.

Prerequisites: VEN 100 (may be taken concurrently).

Credits: 3

Lecture: 2

Lab: 2

VEN 103 - Maintaining a Vinifera Vineyard

Description: Maintaining a vineyard from the point of dormancy through the harvest. Emphasis on crop monitoring techniques, pruning methods, bloom, vine manipulation, and determining vine health. Includes the relationship that exists between the grower and the vintner.

Prerequisites: VEN 100 (may be taken concurrently)

Credits: 4

Lecture: 3

Lab: 2

VEN 121 - Wines of the World

Description: Wines produced throughout the world with an emphasis on history, the growth of grapes, wine production, geography and cultural relevance of different wine types and growing regions. In-depth classification and critique of "New World" versus "Old World" wine regions and styles. Winemaking methods, service, laws and regulations of the major wine regions. Students will taste, evaluate and identify various wine styles. Must be 21 years of age or older to enroll.

Credits: 2
Lecture: 1
Lab: 2

VEN 122 - Sensory Evaluation of Wine

Description: Sensory evaluation specific to wine production with a focus on environmental and cultural winemaking practices contributing to the character of a wine. Basic elements of wine through sensory evaluation including the effects of appearance on taste perception, as well as olfactory and physiological taste mechanisms. Emphasis on specific wine varieties, regions, use of oak in winemaking, secondary fermentation, characteristics of individual wine components and wine flaw threshold identification. Designed for those who need to develop an understanding of the principles of sensory evaluation used in winemaking: the wine enthusiast who is interested in reaching advanced levels of appreciation, the wine steward, the wine merchant, and ultimately the enologist, who by the nature of their profession need to discern flavors and establish tasting benchmarks. Must be 21 years of age or older to enroll.

Credits: 2
Lecture: 1
Lab: 2

VEN 195E - Winemaking Practicum

Description: Practical experience in winemaking while working at an approved winery and receiving supervision from a professional vintner. Students must complete a fall and spring practicum as well as VEN 195ES in the summer. Must be 21 years of age or older to enroll. [Repeatable for a total of 4 credit hours toward degree/certificate requirements.]

Prerequisites: VEN 200 (may be taken concurrently).

Credits: 2
Lab: 4

VEN 195ES - Winemaking Practicum Summer

Description: Practical experience in winemaking while working at an approved winery and receiving supervision from a professional vintner. Students must complete this summer practicum as well as VEN 195E in both fall and spring. Must be 21 years of age or older to enroll.

Prerequisites: VEN 200 (may be taken concurrently).

Credits: 2
Lecture: 0
Lab: 4

VEN 195V - Viticulture Practicum

Description: Practical experience in vineyard operations partnering with an approved vineyard. Students must complete a fall and spring practicum as well as VEN 195VS in the summer. [Repeatable for a total of 4 credit hours toward degree/certificate requirements.]

Prerequisites: VEN 100 (may be taken concurrently).

Credits: 2
Lecture: 0
Lab: 4

VEN 195VS - Viticulture Practicum Summer

Description: Practical experience in vineyard operations partnering with an approved vineyard. Students must complete this summer practicum as well as VEN 195V in both fall and spring.

Prerequisites: VEN 100 (may be taken concurrently).

Credits: 2
Lecture: 0
Lab: 4

VEN 200 - Science of Winemaking I

Description: Winemaking principles of fruit selection, pre-harvest analyses, fruit processing, juice additions, alcoholic and malo-lactic fermentations. Includes winery hygiene and safety. Must be 21 years of age or older to enroll.

Credits: 3
Lecture: 3
Lab: 0

VEN 201 - Science of Winemaking II

Description: Chemistry of winemaking, wine analysis and quality control. Emphasis on wine composition, wine analytical techniques, and the relevance of these analyses to winemaking decisions. Includes wine filtration and post-fermentation wine stewardship. Must be 21 years of age or older to enroll.

Prerequisites: VEN 200

Credits: 3
Lecture: 2
Lab: 2

VEN 202 - Science of Winemaking III

Description: Economics related to wine production and sales including federal, state, and local regulations. Winery business plans, state and federal winery permits, wine production, taxation, reporting, labeling, market research, and sales and distribution. Must be 21 years of age or older to enroll.

Prerequisites: VEN 201.

Credits: 3
Lecture: 2
Lab: 2

VEN 299 - Independent Study Viticulture and Enology

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Video Game Development

VGD 121 - Video Game Development for Game Engines

Description: Introduction to the creation of video games primarily through the use of drag and drop techniques. Covers the creation of single player games, use of image and sound files in games, creation of simple code logic structures, and the deployment of games.

Credits: 3

Lecture: 3

Lab: 0

VGD 122 - Video Game Development for Game Engines II

Description: Techniques and skills necessary to create games in multiple genres for recreational and educational uses. Includes the applications of coding, interactive game logic, variables and simple probability when developing video games.

Prerequisites: VGD 121 (may be taken concurrently).

Credits: 3

Lecture: 3

Lab: 0

VGD 151 - 3D Modeling and Animation

Description: Introduction to the techniques used to create 3D objects and animation for games, TV, and movies using professional 3D modeling and animation software. Includes modeling solid objects, object surfacing and shaders, object animation, lighting techniques, camera parameters, creation of environments, and the configuration of rendering engines.

Credits: 3

Lecture: 3

Lab: 0

VGD 152 - 3D Modeling and Animation II

Description: Modeling and animation skills used to develop 3D objects. Includes application of techniques used to create environments and objects with organic shapes.

Prerequisites: VGD 151.

Credits: 3
Lecture: 3
Lab: 0

VGD 171 - Video Game Development - Programming

Description: Introduction to modern Object Oriented Programming through the development of video games for a variety of platforms, using an integrated development environment (IDE) and related software.

Credits: 3
Lecture: 3
Lab: 0

VGD 172 - Video Game Development - Programming II

Description: General object oriented programming and specialized coding techniques to build a basic 3D video game. Topics include 3D space coordinate programming for cameras, camera targets, models, object collisions in 3D space and scene lighting.

Prerequisites: VGD 171 (may be taken concurrently).

Credits: 3
Lecture: 3
Lab: 0

VGD 180 - Game Theory and Design Principles

Description: Introduction to major topics in video game design, game design basics, designing a game, and working as a game designer. Emphasis on the principles of game design through identifying, comparing, and contrasting examples of design elements in various pre-existing games.

Credits: 3
Lecture: 3
Lab: 0

VGD 221 - Video Game Development for Game Engines III

Description: Advanced work in game development emphasizing the use and control of biped and other characters in the game environment.

Prerequisites: VGD 122.

Credits: 3
Lecture: 3
Lab: 0

VGD 222 - Video Game Development for Game Engines IV

Description: Advanced work in game development emphasizing techniques for development of games for smartphones and tablets including the deployment, sale, and distribution of games through online marketplaces.

Prerequisites: VGD 122

Credits: 3

Lecture: 3

Lab: 0

VGD 251 - Advanced 3D Modeling and Animation

Description: Modeling and animation skills with emphasis on advanced character modeling and animation techniques and the use of specialized surfacing tools and techniques.

Prerequisites: VGD 151

Credits: 3

Lecture: 3

Lab: 0

VGD 252 - 3D Modeling and Animation IV

Description: Advanced animation and modeling skills with an emphasis on techniques and tools to create and edit motion capture data files.

Prerequisites: VGD 152

Credits: 3

Lecture: 3

Lab: 0

VGD 280 - Game Design Documentation and Marketing

Description: Hands-on experience with principles of game design documentation. Emphasis on creating a video game design document proposal, with accompanying design documents, marketing materials, and financial projections.

Prerequisites: VGD 180

Credits: 4

Lecture: 4

Lab: 0

VGD 295 - Video Game Design Project

Description: The class will team together in the creation of game design documents, development of a game, and publication of a game. Game idea and outcome supplied by instructor.

Prerequisites: VGD 222 and VGD 252 and VGD 280 (may be taken concurrently with instructor approval).

Credits: 4

Lecture: 3

Lab: 2

VGD 296 - Internship: Video Game Development

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility.

Prerequisites: Student must have a GPA of 2.0; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3

Lecture: Varies

Lab: Varies

VGD 299 - Independent Study Video Game Development

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6

Lecture: Varies

Lab: Varies

Welding

WLD 112 - Oxyacetylene Welding for Non-Welding Majors

Description: Designed for automotive, electronics, and other non-welding majors. Basics of oxyacetylene welding, including safety, welding techniques, basic metallurgy and welding gases. This course not intended to prepare students to take any AWS certification exams.

Credits: 2

Lecture: 1

Lab: 3

WLD 113 - SMAW/GMAW Welding for Non-Welding Majors

Description: Designed for automotive, electronics, and other non-welding majors. Basics of shielded metal arc welding (SMAW) and gas metal arc welding (GMAW). This course not intended to prepare students to take any AWS certification exams.

Credits: 2

Lecture: 1

Lab: 3

WLD 130 - Oxyacetylene

Description: Safety, oxyacetylene welding, flame cutting, brazing fundamentals and fuel gases. Competency mastery required.

Credits: 4

Lecture: 2

Lab: 6

WLD 140 - Arc I

Description: Fundamentals of basic shielded metal arc welding (SMAW) procedures, equipment and safety.

Credits: 4

Lecture: 2

Lab: 6

WLD 145 - Arc II

Description: Advanced shielded metal arc welding procedures, equipment, safety and cutting techniques.

Prerequisites: WLD 140

Credits: 4

Lecture: 2

Lab: 6

WLD 156 - Blueprint Reading

Description: Fundamentals of reading and interpreting blueprints and welding symbols as they apply to the welding trade.

Credits: 4

Lecture: 3

Lab: 3

WLD 200 - Gas Tungsten Arc Welding

Description: Selection of electrode, gas, cups, and filler rod for gas tungsten arc welding (GTAW). Techniques and practice in welding butt-joint, t-joint, lap and corner joints in various positions.

Prerequisites: WLD 130

Credits: 4

Lecture: 2

Lab: 6

WLD 210 - Gas Metal Arc Welding

Description: Setup and safe operation of gas metal arc welding (GMAW) equipment, GMAW welding of carbon steel plate, aluminum plate and sheet metal.

Credits: 4
Lecture: 2
Lab: 6

WLD 250 - Welded Metal Fabrication

Description: Metal used in manufacturing fabrication and welding techniques. Emphasis on project planning, layout and blueprint reading.

Prerequisites: WLD 113 or WLD 145 or WLD 200 or WLD 210 or instructor permission.

Credits: 4
Lecture: 2
Lab: 6

WLD 282 - Pipe Welding I

Description: Welding of pipe in cross-country pipe lines in industry including chemical, petroleum, salt water, fresh water, fuel system, hydraulic systems and mining.

Prerequisites: WLD 145

Credits: 4
Lecture: 2
Lab: 6

WLD 296 - Internship: Welding

Description: Supervised field experience with businesses, corporations, government agencies, schools and community organizations to expand career interests and apply subject knowledge relevant to the workplace. Individualized internship placements to develop personal and professional skills, including professional ethics, leadership, and civic responsibility. [Repeatable for a total of 6 credit hours toward degree/certificate requirements.] S/U grading only.

Prerequisites: Student must have a GPA of 2.0 ; have completed specific degree requirements as required by the program; and have completed the internship application process.

Credits: 3
Lecture: Varies
Lab: Varies

WLD 299 - Independent Study Welding

Description: Supervised special project in this field of study. Approval of supervising Division Dean is required.

Credits: 1-6
Lecture: Varies
Lab: Varies

Emeriti Directory

Faculty Emeriti

AINSA, SERGE, *Modern Languages* (1974-2007)
BARKHURST, RODNEY, *Chemistry* (1981-2000)
BARTELS, DIETER, *Social Sciences/Humanities* (1978-2011)
BEAUCHMAN, MOLLY, *Math* (2004-2008, 2010-2023)
BENNETT, JAMIE, *Geography* (1992-2007)
BENTZ, VICTORIA, *Accounting* (1997-2023)
BLISS, SELINA, *Nursing* (1994-2021)
BOYD, BETH, *Geology* (2009-2021)
BREILING, ROY, *Music* (1995-2014)
CATON, GERALD, *Accounting & Computer Science* (1988-2010)
CHANDA, VIRGINIA "GINNY", *English* (1979-2006)
DeCECCO, CYNTHIA, *Art* (2000-2018)
DICKY, ARCHIE, *Biology* (1974-1998)
DWAN, DIANA, *Math* (1987-2015)
ELLIS, CARLEEN, *Nursing* (1976-1991)
EWING, PAUL, *History/Philosophy* (1989-2017)
FISHER, WILLARD, *Music* (1964-2011)
FUEMMELER, GENNIE, *Teacher Education/Reading* (1996-2010)
GLIDDEN, MOSES, *English* (1993-2011)
GOLDEN, BARRY, *Biology/Chemistry* (1984 -2003)
GORMAN, DAVID, *Mathematics* (2000-2021)
GOVEDICH, STEPHEN, *Psychology/Sociology* (1981-2003)
HAMILTON, JERI, *Mathematics* (2003-2021)
HAMMOND, CAROL, *English* (1987-2010)
HINTON, JAMES, *Administration of Justice, Political Science, Sociology* (1974-2009)
HOCHSTETTLER, DAVID, *Humanities/Honors* (1972-1993)
KELLY, VINCE, *Art* (1971-1999)
LANG, SUSAN, *English* (1983-2003)
LAWHEAD, LeANNE, *Early Childhood Education* (2007-2020)
LONGFIELD, RICHARD, *Music* (1972-1993)
MARCUSEN, RICHARD, *Art* (1971-2000)
MASON, STEPHEN, *Art* (2001-2019)
MCCREA, LAUREN, *Art*, (2001-2020)
MERRITT, MARILYNN "LYNN", *Health, Physical Education & Recreation* (1969-1994)
MILES, JAMES "KIMO", *Health, Physical Education & Recreation* (1975-2004)
NUGENT, LYNN, *Nursing* (1979-2003)
O'NEIL, KAREN, *Nursing* (1982-2003)
PERLMUTTER, NINA, *Philosophy* (1994-2006)

PETERSON, GLEN, *Art* (1973-1998)
REISDORFER, KATHRYN, *Humanities* (1993-2009)
ROBERTS, DEBORAH, *Liberal Studies/History* (2002-2019)
ROBERTS, W. BRENT, *Mathematics* (1987-2013)
SCHUMACHER, THOMAS, *Art* (1984-2020)
SHERRILL, CLIFF, *Computer Science* (1982-2013)
SIEH, DON, *English/Construction* (1971-1996)
STEIN, AMY, *History* (2009-2022)
TRAYER, ROY, *Art* (2001-2014)
VERBOUT, MARY, *English* (1991-2016)

Other Emeriti

RUSSO, JOSEPH, *College President* (1974-1984)

Deceased Emeriti

BAMRICK, MARY ANNE, *Business* (1969 -1979), *Campus Dean* (1979-1992), *Interim College President* (1992-1993)
BRANSON, EDWARD, *Art* (1969-2000)
BRONANDER, ROY, *Biology* (1971-1995)
BURNS, JAMES, *Music* (1969-1983)
FARRAR, ELAINE, *Art* (1973-1992)
GALDE, DOROTHY ALTA, *English* (1969-1979)
GRASER, DAVID, *Mathematics* (1998-2020)
HAYNES, JOHN, *English* (1969-1995)
HORTON, JAMES, *College President* (2005-2011)
MIKULEWICZ, ROBERT, *Journalism* (1969-1981)
MINKLER, LYLE, *Physical Science* (1969-1996)
PHILLIPS, JEAN, *YC Foundation Volunteer*
QUINTERO, GEORGE, *Registrar* (1969-1983)
RAWLINGS, DONN, *English* (1985-2001)
ROBERTS, RUSS, *Business & Computer Science* (1982-2013)
SIEGFRIED, KARL, *Mathematics* (2004-2020)

Glossary of Terms

The following terms are often used at Yavapai College in written materials and in conversations with advisors and faculty. Use this guide to learn more about their meaning.

A

Ability to Benefit - Term used to describe a student's chances of being successful in a college-level course of study. A high school diploma, GED or equivalent can be used to document the ability to benefit from college.

Academic Advisement - Consulting with a college advisor to develop a plan for fulfilling the requirements to reach an educational objective. Participating in the advisement process will minimize the loss of credits for students planning to transfer.

Academic Calendar - The College's Academic Calendar contains key dates important to every student, including holidays and the start and end dates of classes.

Academic Honors List - An honor bestowed upon students who demonstrate exemplary performance. To be eligible, a student must complete 12 or more credits in that semester with a grade point average of 3.5 or higher.

Academic Notice - A student is placed on Academic Notice (AP) if, while on Academic Warning, the student earns less than a 2.0 semester GPA in the subsequent semester (based on attempted credits). See Student Rights & Responsibilities for further detail.

Academic Renewal - Academic Renewal allows a student who experienced academic difficulties during earlier attendance at Yavapai College to have grades for a particular period of time excluded from the calculation of the grade point average. All courses and grades remain on the student's permanent academic record.

Academic Suspension - A student is placed on Academic Suspension (AS) if, while on Academic Notice, the student does not achieve a cumulative GPA of 2.0 or above during the second semester of Academic Notice. See Student Rights & Responsibilities for further detail.

Academic Warning - A student is placed on Academic Warning (AW) if the student has attempted 12 credits or more and earned a cumulative GPA of less than 2.0. See Student Rights & Responsibilities for further detail.

Add - This term refers to the period of time when students can add a class to their class schedule for a particular semester.

Admission - Those who meet admission requirements and who complete the online college admission application are immediately admitted to the college and receive credentials to enable online registration for classes.

Advising - The College provides free advising services to all students for help with program planning and course selection.

AGEC (Arizona General Education Curriculum) - A common structure of general education agreed upon by all public colleges and universities in Arizona. The AGECEC, a 35-credit general education component of the Associate degrees for transfer, fulfills lower-division general education requirements for students transferring to Arizona's public universities (Arizona State University, Northern Arizona University, and University of Arizona).

Articulation - The acceptance or transfer of coursework through special agreements. Yavapai College articulates transfer of courses to Arizona's public universities (Arizona State University, Northern Arizona University and University of Arizona).

Associate Degree - A degree awarded by a community college upon satisfactory completion of an organized program of study. An associate degree requires the completion of a minimum number of credits with a certain combination of courses, including general education and major requirements, and can usually be completed in two years of full-time attendance. For more detailed information, see an advisor or refer to the "Degrees & Certificates" section of this catalog.

Audit - Students who audit a class attend class meetings but do not receive credit or a grade for the course.

B

Bachelor Degree - A degree awarded by a college or university upon satisfactory completion of an organized program of study. A bachelor degree requires completion of a minimum number of credits with a certain combination of courses, including general education and major requirements, and can usually be completed in four years of full-time attendance. For more detailed information, see an advisor or refer to the "Degrees & Certificates" section of this catalog.

Bachelor of Applied Science Degree - An optimized Bachelor degree awarded by a college or university after satisfactory completion of an organized program of study. A bachelor of applied science degree requires completion of a minimum number of credits with a certain combination of courses, including general education and major requirements, and can usually be completed in three years of full-time attendance. For more detailed information, see an advisor or refer to the "Degrees & Certificates" section of this catalog.

C

Catalog - The College Catalog is published online annually. The Catalog contains information about the policies and services of Yavapai College, including all degree and certificate programs, course requirements and descriptions, and student resources.

Catalog Year - The year in which a student begins a program of study and subsequently maintains continuous enrollment. The requirements for the degree or certificate will be those which were in effect the catalog year the student began the program and maintained continuous enrollment.

CEG (Course Equivalency Guide) - The CEG indicates how each of the public universities in Arizona accept 100- and 200-level courses in transfer from each community college. The CEG is available online at AZTransfer.com.

Class Standing - *Freshman*: First year class standing - students who have between 0 and 29.9 cumulative credits. *Sophomore*: Second year standing - students who have between 30 and 59.9 cumulative credits. *Junior*: Third year class standing - students who have between 60 and 89.9 cumulative credits. *Senior*: Fourth year class standing - students who have between 90 and 120 cumulative credits.

CLEP Test - College Level Examination Program - Credit via prior learning may be earned through successful scoring on general or subject area CLEP testing. Some disciplines may have additional requirements to demonstrate accomplishment of learning outcomes (e.g. writing samples, laboratory).

Continuous Enrollment - Students maintaining continuous enrollment (fall/spring) at any public Arizona community college or university may graduate from Yavapai College according to the requirements of the catalog in effect at the time of initial enrollment or according to the requirements of any single Yavapai College catalog in effect during subsequent terms of continuous enrollment.

Co-requisite - A co-requisite refers to a related course that must be taken at the same time as another related course (e.g. science lecture and science lab).

Core Requirements (Core Courses) - Core requirements (courses) are the required courses within a degree or certificate and must be completed with a grade of "C" or better.

Course Program of Study (CPOS) - is a federal requirement stating that only courses that count toward a student's program of study can be considered when determining Federal Financial Aid eligibility.

Credit Hour (Federal Definition): A credit hour is the amount of work represented in learning outcomes and verified by evidence of student achievement. It is an institutionally-established equivalency that is not less than: (1) one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester hour of credit, or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work as required in paragraph one of this definition for other activities as established by an institution, including laboratory work, internships, practicums, studio work, and other academic work leading toward the award of credit hours.

D

Drop - This term refers to the period when students can drop a class. Dropped classes do not appear on the student's academic transcript.

E

Educational Plan - A written outline of all courses required to complete a specific program.

Elective - Elective courses are in addition to the core requirements of a program. Students choose electives based on a list specified by their program or in specific approved areas of interest. Electives must have a course number of 100 or higher to count toward graduation. Students should choose electives in consultation with their program advisor.

Expected Family Contribution (EFC) - The sum of the parent and student contributions toward educational costs as determined by the need analysis based on FAFSA data. For 24-25 the results of FAFSA Calculation will now be called the Student Aid Index (SAI)

F

FAFSA - The Free Application for Federal Student Aid (FAFSA) is a required form that must be completed as the first step in applying for many types of financial aid. This application can be found at www.studentaid.gov

Family Contribution - The sum of the parent and student contributions toward educational costs as determined by the need analysis.

Federal Direct Subsidized and Unsubsidized Educational Loans (FDSL) - Federal Loans for parents and students which are both need based and non-need based. Loans must be repaid with interest. Interest rate is fixed each academic year on July 1st by the Department of Ed for that Academic year's loans borrowed.

Federal Family Education Loans (FFEL) - Federal Loans for parents and students which are both need based and non-need based. Loans must be repaid with interest. Interest rate varies. This Federal Program was ended by The Department of ED and no new loans are currently being made in this program.

Federal Work Study (FWS) - Program in which students work part-time to earn a portion of their financial aid award.

Federal Supplemental Educational Opportunity Grant (FSEOG) - One of the Federal Campus Based grant programs available at Yavapai College. Priority is given to PELL grant recipients by law.

Financial Aid Package/Award - An offer of financial aid which combines various forms of aid, typically from one or more sources.

Financial Need - The basis for most financial aid awards. Determined by subtracting the family contribution calculation from an institution's cost of attendance.

Full-Time Student - Students are considered full time if they are registered for twelve or more credit hours in a semester. (This definition may not apply to veteran's benefits. Check with the Veteran's benefits department for details.)

G

General Education - A plan of course work generally covering the areas of natural sciences, mathematics, communication skills, humanities, and critical thinking required to complete a degree.

Good Standing - To stay in good academic standing with the institution, a student must maintain a GPA of 2.0 or better and earn credit in at least one-half the credits for which registered. Financial Aid recipients must complete 66.67% of the credits attempted to remain in good standing for State and Federal Financial Aid programs.

Grade Point Average (GPA) - The average grade earned by a student, figured by dividing the total grade points earned by the total credits completed.

Grade Points - The product of multiplying the value of a letter grade (A=4, B=3, C=2, D=1, F=0) by the credit value of a class. These points are used in computing a student's GPA.

Graduate Degree - An advanced degree (Master's or Doctorate) which is undertaken after completion of a Bachelor's degree.

H

Hold - A hold must be resolved by the student by logging into **myYC** to determine who to contact to clear their student account. Students who owe money, fail to return materials or who do not provide requested documentation will have a hold placed on their record. Holds usually prevent registration.

I

Incomplete Grade - A grade of "I" (Incomplete) may be assigned by an instructor when a student has been unable to complete academic work for a class by the end of the term due to an unforeseeable emergency and for justifiable reasons. To qualify, a student must have completed a significant majority of the work required for the class while maintaining a "C" average for work submitted and who is capable of completing the remainder of the required work for the course within the allotted time.

Independent Study - Independent Study allows opportunities for academic learning beyond what the College provides in the normal curriculum. This may involve creating a course in a field where Yavapai has no courses at all, or it may involve creating courses more advanced or specialized than existing courses, allowing students to seek knowledge or skills not otherwise available in the College. Independent Study is not for non-college credit activities or for developmental studies.

Internship - Internships involve structured field experiences within specific academic disciplines or technical areas. These experiences enable students to explore potential careers and apply knowledge gained in the classroom while refining the technical skills and gaining relevant experience in the workplace.

L

Leveraging Educational Assistance Partnership Grant (LEAP) - A type of grant available to students who are residents of Arizona. Awards are given on a first come-first-served basis.

Lower Division - Course work normally taken in the first two years of college, at the freshman and sophomore levels. Courses numbered 100-299 at Yavapai College are lower division.

M

Matriculation - The completion of steps necessary for reaching an educational objective, including application, assessment, enrollment in classes, academic progress, and graduation or transfer.

N

Need Analysis - The process of determining a student's eligibility for financial aid. The analysis involves establishing student expense budgets, determining the family contribution (EFC) or the Student Aid Index (SAI), and calculating a student's Financial Aid eligibility.

No Show - Students may be dropped as a "no show" by the instructor during the add/drop period if the student does not attend/participate in a class.

O

Orientation - A workshop designed to introduce new students to campus life and other resources to promote student success.

P

Part-time Student - A part-time student is a student registered for less than twelve credit hours in a semester.

Pell Grant - The primary federal grant program. These awards do not have to be repaid as long as the student makes satisfactory academic progress.

Prerequisite - A prerequisite is a required course, level of learning, or assessment score required prior to enrollment in a specific class. Prerequisites are listed in the college catalog with the course description. A prerequisite waiver may be approved by an academic advisor if there is documentation/evidence that the student completed the pre-requisite; an instructional dean may approve a prerequisite in some cases when student has documentation of comparable preparation.

Prior Learning Assessment (PLA) - Opportunity for students to earn college credit for approved learning gained outside the classroom. Examples include agency certifications and other documented learning such as Google certifications.

R

Registration - Registration is the process of selecting classes, processing selections online, and paying tuition and fees.

S

Schedule of Classes - Yavapai College publishes an online listing of classes offered during the fall, spring, and summer semesters. The schedule of classes contains all information needed to register for a class, including time, date, location, instructor, costs, and any enrollment restrictions.

Semester - A length of time that a school term lasts. Yavapai College has a 16-week semester (15 weeks of instruction).

Special Circumstances - a process by which a student can provide additional documentation to the Financial Aid office to facilitate a Professional Judgement file review due to extenuating circumstances such as loss of job or income, additional medical bills, etc.

Student Aid Index (SAI) - Results from a student/family completing a FAFSA. Beginning in 2024-25 the SAI will be replacing the EFC in determining PELL Grant and calculating other financial aid eligibility.

T

TBA (To Be Arranged) - TBA is a term used in the Schedule of Classes to indicate that more information is forthcoming about the course. Example: If TBA shows in the instructor column of the schedule, the course had not yet been assigned to a particular instructor.

Transcript - The permanent record of all classes taken while enrolled at a college or university. An official transcript is issued by the College Registrar and contains a master list of the courses a student has taken, the grades earned, and the cumulative grade point average. Yavapai College official transcripts can be requested at www.yc.edu/transcripts or from the Office of the Registrar. Students can view their unofficial transcripts online via myYC.

Transfer - The process of moving from one college to another prior to completion of the student's education goal.

Transfer Guide - University Transfer Guides list the Yavapai College courses that transfer and fulfill degree requirements at ASU, NAU and the UA.

U

Units - Also referred to as credit hours.

Upper Division - Course work normally taken in the third and fourth years of college, at the junior and senior levels. Courses numbered 300-499 are upper division.

V

Verification - A process by which the Financial Aid Office reviews additional documentation provided by a student and/or their family (as required by the Department of ED) to solve any conflicting information in a financial aid application.

W

Withdraw - A student's removal from enrollment in a class within a specified time period. A withdraw is recorded on the student's permanent transcript. Refer to "Dates and Deadlines" at www.yc.edu for semester-specific withdraw deadlines.

Professional Licensure Disclosure

Yavapai College offers several programs leading to professional licensure or certification in Arizona. If you are considering a licensure program, it's essential for you to understand if the program meets the requirements in the state you are planning to reside and work. Please visit <http://www.yc.edu/stateauthorization> and <http://www.yc.edu/generaldisclosure> for additional information.

Basics of Professional Licensure

States can vary in the professions they require to be licensed and how licensure is acquired. Licensure may require one or more of the following:

- graduate from an approved program
- additional conditions unrelated to educational prerequisites which may include meeting certification requirements of a national organization, specific training, or passage of an exam.

Licensure and certification requirements are set by agencies, not controlled by or affiliated with Yavapai College. These requirements and state laws, regulations, and policies can change at any time.

Additional information and suggestions regarding professional licensure

- Review the Professional Licensure by State document to begin your search to verify if the program you're interested in meets the educational requirements for licensing/certification in your home state (or the state where you intend to practice).
- Students should review the specific academic requirements for the program in which they plan to enroll, including pre-qualifications for licensure. Yavapai College recommends that students contact the program lead or director with professional licensure/certification questions before enrolling in the program.
- It is the student's responsibility to check with the licensing entity in their state of residence, or in the state in which they intend to obtain a license, before beginning a licensure program and for the most up-to-date information and requirements.
- Relocating to another state while enrolled in a licensure program may impact your ability to remain in the program and/or meet the state licensure or certification requirements.
- If you have questions regarding any program not listed on the Professional Licensure by State document, please contact the program lead or director. Many degree programs do not involve professional licensure or certification.