

ARIZONA WESTERN COLLEGE  
SYLLABUS

GME 122 PYTHON PROGRAMMING

Credit Hours: 3 Lec 2 Lab 2

PREREQUISITE: MAT 151 or higher level math

COURSE DESCRIPTION

This course will provide a hands-on introduction to the Python programming language with a focus on practical applications and projects. Students will design and build software to solve problems from various disciplines each week using Python packages, data structures, object-oriented programming.

1. COURSE GOAL

Apply the designs and concepts of object- oriented programming for developing (including 3<sup>rd</sup> party Python packages), debugging, and documenting programs written in the Python language.

2. OUTCOMES

Upon satisfactory completion of this course, students will be able to:

- 2.1 Familiarity with the Python programming language and associated development tools (IDEs, pip)
- 2.2 Hands-on experience using various Python data structures, and reading and writing files in Python
- 2.3 Experience with Object-Oriented design in Python, including polymorphism
- 2.4 Experience leveraging powerful 3rd party packages for Python, as well as creating your own custom Python packages for reuse and distribution

3. METHODS OF INSTRUCTION

- 3.1 Lecture
- 3.2 Multi-media Presentations
- 3.3 Group Discussions

4. LEARNING ACTIVITIES

- 4.1 Group Discussions
- 4.2 Oral Presentations
- 4.3 Classroom Demonstrations

5. EVALUATION

- 5.1 Quizzes/Exams
- 5.2 Assignments
- 5.3 Participation

## 6. STUDENT RESPONSIBILITIES

- 6.1 Under AWC Policy, students are expected to attend every session of class in which they are enrolled.
- 6.2 Classroom Assignments: Students are responsible for work missed and for completing all work before the next class meeting. Students are responsible for participating in all oral drills and for taking all exams.
- 6.3 If a student is unable to attend the course or must drop the course for any reason, it will be the responsibility of the student to withdraw from the course. Students who are not attending as of the 45th day of the course may be withdrawn by the instructor. If the student does not withdraw from the course and fails to complete the requirements of the course, the student will receive a failing grade.
- 6.4 Americans with Disabilities Act Accommodations: Arizona Western College provides academic accommodations to students with disabilities through AccessABILITY Resource Services (ARS). ARS provides reasonable and appropriate accommodations to students who have documented disabilities. It is the responsibility of the student to make the ARS Coordinator aware of the need for accommodations in the classroom prior to the beginning of the semester. Students should follow up with their instructors once the semester begins. To make an appointment call the ARS front desk at (928) 344-7674 or ARS Coordinator at (928) 344-7629, in the College Community Center (3C) building, next to Advising.
- 6.5 Academic Integrity: Any student participating in acts of academic dishonesty including, but not limited to, copying the work of other students, using unauthorized “crib notes”, plagiarism, stealing tests, or forging an instructor’s signature—will be subject to the procedures and consequences outlined in AWC’s Student Code of Conduct.
- 6.6 Textbooks and materials: Students are required to bring notebook or looseleaf book, pens, pencils, dictionaries, and purchase textbook required for class.
- 6.7 Arizona Western College students are expected to attend every class session in which they are enrolled. To comply with Federal Financial Aid regulations (34 CFR 668.21), Arizona Western College (AWC) has established an Attendance Verification process for “No Show” reporting during the first 10 days of each semester. Students who have enrolled but have never attended class may be issued a “No Show” (NS) grade by the professor or instructor and receive a final grade of “NS” on their official academic record. An NS grade may result in a student losing their federal financial aid.

For online classes, *student attendance in an online class is defined as the following* (FSA Handbook, 2012, 5-90):

- Submitting an academic assignment
- Taking an exam, an interactive tutorial or computer-assisted instruction
- Attending a study group that is assigned by the school
- Participating in an online discussion about academic matters
- Initiating contact with a faculty member to ask a question about the academic subject studied in the course