

ARIZONA WESTERN COLLEGE  
SYLLABUS

FSC 202 FIRE PROTECTION HYDRAULICS AND WATER SUPPLY

Credit Hours: 3 Lec: 3

PREREQUISITE: MAT 105 or approved higher level math

COURSE DESCRIPTION

Course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

1. COURSE GOALS

- 1.1 Apply water hydraulic principles
- 1.2 Demonstrate knowledge of water hydraulics as it relates to fire protection

2. OUTCOMES

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

- 2.1 apply the application mathematics and physics to the movement of water in fire suppression activities.
- 2.2 identify the design principles of fire service pumping apparatus.
- 2.3 analyze community fire flow demand criteria.
- 2.4 demonstrate, through problem solving, a thorough understanding of the principles of forces that affect water, both at rest and in motion.
- 2.5 list and describe the various types of water distribution systems.
- 2.6 discuss the various types of fire pumps.

3. METHODS OF INSTRUCTION

- 3.1 Lecture
- 3.2 Instructional technology
- 3.3 Classroom exercises and simulations

4. LEARNING ACTIVITIES

- 4.1 Lectures
- 4.2 Demonstrations
- 4.3 Field trips
- 4.4 Presentations
- 4.5 Practical applications
- 4.6 Class discussions

5. EVALUATION

- 5.1 Written evaluations
- 5.2 Assignments
- 5.3 Class 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 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 Students who are not attending as of the 45th day of the course may be withdrawn by the instructor.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.

6.3 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.

6.4 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.

6.5 Texts and Notebooks: Students are required to obtain the class materials for the course.

6.6 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