

ARIZONA WESTERN COLLEGE  
SYLLABUS

CIS 275 FUNDAMENTALS OF NETWORK SECURITY

Credit Hours: 3 Lecture 2 Lab 2

PREREQUISITE: CIS 175

NOTE: Skills and knowledge related to basic security and networks recommended.

COURSE DESCRIPTION

Overview of security measures for computer networks.

1. COURSE GOAL

Preparation for the industry standard security exam

2. OUTCOMES

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

- 2.1 develop techniques to creating/storing usernames and passwords.
- 2.2 explain the methods used for digital signatures, certificates, and tokens.
- 2.3 discuss code and techniques used in network attacks.
- 2.4 describe vulnerability in email, web tools, and software.
- 2.5 identify remote access methods and vulnerability.
- 2.6 develop LDAP and File Transfer Protocols.
- 2.7 explain wireless protocols and security.
- 2.8 design and evaluate secure network topologies.
- 2.9 evaluate methods of intrusion detection.
- 2.10 explain the logic underlying basic cryptography algorithms.
- 2.11 assess the risk of security designs.

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
- 4.4 Lab exercises

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 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 Students who are not attending as of the 45th day of the course may be withdrawn by the instructor.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.