

ARIZONA WESTERN COLLEGE
SYLLABUS

PIT 140 Fortinet Certified Fundamentals Cybersecurity

Credit Hours: 3 Lec 2 Lab 2

PREREQUISITE: None

COREQUISITE:

COURSE DESCRIPTION

This course is designed to equip students with practical skills in network security using Fortinet technologies. Through hands-on lab exercises, students will apply their theoretical knowledge in real-world scenarios, gaining valuable experience in operating the most common FortiGate features. Students will build on a solid foundation in network security concepts, enabling them to address cybersecurity challenges effectively. Students will learn how to configure and manage FortiGate devices, implement firewall policies, establish secure virtual private networks (VPNs), and conduct network monitoring and analysis. By the end of the course, students will have developed a deeper understanding of network security principles and best practices. Students will possess the skills necessary to protect critical network infrastructure and be well-prepared to pursue the associate-level credential by passing the Network Security Expert (NSE) Associate exam.

1. COURSE GOAL

- 1.1 Design patterns for architecting optimal cybersecurity solutions on Fortinet devices and troubleshooting Fortinet strategies and services.
- 1.2 Prepare students for the Fortinet Certified Associate Cybersecurity exam.

2. OUTCOMES

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

- 2.1 Describe cybersecurity and the principles of information security and identify the types of bad actors, their methods, and countermeasures used against them.
- 2.2 Explain how to secure network models and technologies like SD-WAN and SASE can enhance cybersecurity.
- 2.3 Configure the most common and high-level features on FortiGate devices.
- 2.4 Connect remote users to the corporate network securely using VPNs.
- 2.5 Restrict access to network resources and monitor essential indicators and logs on FortiGate devices.

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 Digital Presentations
- 4.3 Interactive Virtual Practice

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