ARIZONA WESTERN COLLEGE SYLLABUS

CSC 261 INTRODUCTION TO Linux/UNIX Operating Systems

Credit Hours: 3 Lec: 2 Lab: 2

PREREQUISITE: CSC 127A or EGR 123

COURSE DESCRIPTION:

Introduces the Linux/UNIX family of operating systems. Basic commands, utilities, system structures, scripting and tools are explored. Elements of system administration and networking are presented. Course topics will include the Linux/UNIX user environment, commands, file system, processes, networking, and utilities, as well as Linux/UNIX history and philosophy. Specific emphasis will be given to the bash shell and user environment.

1. COURSE GOAL

Provide students with working knowledge of the Linux/UNIX family of operating systems. Hands-on practice will be highlighted.

2. OUTCOMES

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

- 2.1 demonstrate the understanding of Linux/UNIX operating systems functions and concepts.
- 2.2 research historical and current issues within the Linux/Unix operating systems family.
- 2.3 find and use Linux/UNIX commands from the command line.
- 2.4 organize and manage files within the Linux/UNIX file system.
- 2.5 organize and manage processes within Linux/UNIX.
- 2.6 combine Linux/UNIX tools using features such as filters, pipes, redirection, and regular expressions.
- 2.7 customize the UNIX/Linux working environment.
- 2.8 utilize basic Linux/UNIX shell scripting to be able to successfully read/write bash shell scripts.
- 2.9 demonstrate how to use Linux/UNIX resources to obtain additional information about Linux/UNIX commands and features.
- 2.10 implement and utilize networking and communication processes in Linux/UNIX.

3. <u>METHODS OF INSTRUCTION</u>

- 3.1 Lecture
- 3.2 Labs
- 3.3 Multi-media resources
- 3.4 In-class demonstrations of Linux/UNIX concepts
- 3.5 Individualized instruction

4. LEARNING ACTIVITIES

- 4.1 Reading assignments
- 4.2 Lecture and discussion
- 4.3 In-class Linux/UNIX hands-on activities using virtualization software
- 4.4 Current events discussions/practice activities relating to Linux/UNIX

5. EVALUATION

- 5.1 Assigned projects
- 5.2 Assigned hands-on labs
- 5.3 Written assignments
- 5.4 Exams

6. STUDENT RESPONSIBILITIES

- 6.1 Under AWC Policy, students are expected to attend every session of class in which they are enrolled.
- 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.
- 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.
- 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.
- 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