

ARIZONA WESTERN COLLEGE  
SYLLABUS

## MCB 130 COMPUTER APPLICATIONS AND HEALTHCARE TECHNOLOGIES

Credit Hours: 3 Lec: 2 Lab: 2

PREREQUISITE: CIS 120

COURSE DESCRIPTION

This course provides an overview of healthcare information systems with an emphasis on computerized health information management (HIM) applications and functions. Students will review common software applications utilized to perform HIM processes. Students will explore the emerging technology issues in the healthcare system.

1. COURSE GOAL

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2. OUTCOMES

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

- 2.1 Identify the various current healthcare information systems and their roles in healthcare, such as patient registration, admission-discharge-transfer (ADT), laboratory, electronic health records (EHR), computerized provider order entry (CPOE), radiology, pharmacy, nursing and financial-charge master.
- 2.2 Identify the implementation steps of an information technology (IT) system project.
- 2.3 Identify the effect of organizational change.
- 2.4 Identify the various types of computer software applications specific to HIM, such as abstracting, encoding, grouping, master patient index, document imaging, chart tracking, registries, voice recognition, natural language processing and computer-assisted coding.
- 2.5 Describe and illustrate the components of a database.
- 2.6 Identify primary and secondary data sources.
- 2.7 Describe the elements of a data dictionary.
- 2.8 Differentiate between local and wide area networks, intranets and the Internet.
- 2.9 Identify the major types of data sets, databases, and registries and explore examples used in the healthcare system.
- 2.10 Identify the role of a HIM professional as the vital role they have in data quality and data integrity.
- 2.11 Differentiate between data, health information, informatics, and data analytics.
- 2.12 Identify the principles of information governance.
- 2.13 Identify HIPAA security compliance within a healthcare organization.
- 2.14 Explain the utilization of telehealth.
- 2.15 Promote health IT consumer engagement tools and strategies.
- 2.16 Identify healthcare information exchange (HIE) standards.

3. METHODS OF INSTRUCTION

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

4. LEARNING ACTIVITIES

- 4.1 Assigned Readings
- 4.2 Group Discussions
- 4.2 Group Activities
- 4.3 Assignments

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 loose-leaf 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