

Hagerstown Community College

Master Syllabus

COURSE: HIM 221-Workflow Analysis and Data Mining **DATE:** Spring Semester

INSTRUCTOR: To Be Determined

COURSE DESCRIPTION: This course focuses on how healthcare systems are systematically organized in order to provide patients with the most efficient, safe, and cost effective experience available. Students will explore concepts of workflow analysis and learn the principles of Lean Concepts. Students will learn the importance of collecting and utilizing health information data for the purposes of statistical research and financial reporting. Total of 45 hours of lecture.

TEXTBOOK:
To be Determined

STUDENT LEARNING OUTCOMES:

Upon completion of this course, the student will be able to:

1. Explain the principles of health care data exchange and standards.
2. Assess systems capabilities to meet regulatory requirements.
3. Discuss technology for data collection, storage, analysis, and reporting of information.
4. Recommend device selection based on workflow, ergonomic and human factors.
5. Evaluate system architecture, database design, and data warehousing.
6. Recommend organizational action based on knowledge obtained from data exploration and mining.
7. Analyze workflow design and assessment, and their relationship to patient care, productivity and data analysis; propose the hardware, software, and operating systems and networking considerations necessary for effective data storage and use in health care organizations.
8. Construct the tools and techniques for collecting, storing, securing, retrieving, and reporting health care data.
9. Manage clinical indices, databases, and registries.
10. Analyze clinical data to identify trends that demonstrate quality, safety and effectiveness of healthcare.
11. Interpret inferential statistics.
12. Analyze statistical data for decision making.
13. Discuss quality assessment including quality management, data quality, and identification of best practices for health information systems.

MINIMUM CLOCK HOURS REQUIRED FOR THIS ONLINE COURSE:

	DIRECT Faculty Instruction In-Class (45 hours required)	Student Work Out of Classroom (90 hours required)
In-Class Lecture	40 hours	
Chapter Readings		40 hours
Weekly Quizzes & Activities	Included in Lecture Time	20 hours
Research Project	Included in Lecture Time	10 hours
Examinations	5 hours	20 hours
TOTAL	45	90 hours

Services for Students with Disabilities: Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530.