MOHAWK VALLEY COMMUNITY COLLEGE, UTICA-ROME, NY

COURSE OUTLINE

1. COURSE DESCRIPTION:

**HM231 Health Informatics and Data Analytics** C-2, P-3, Cr-3

This course provides a comprehensive understanding of how informatics and data management relate to the healthcare industry. (Online Only)

**Prerequisites:** HM202 Health Data and Quality Management

1. STUDENT LEARNING OUTCOMES

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

1. Explain methods and functions of the informatics field.
2. Conduct an in-depth analysis of data types, standards, data quality, and the interpretation and display of information.
3. Apply ethics in informatics, with focus on impact on provider-patient relationships, empirical research, and health literacy.
4. Explain research and data analytics methods, including advanced analysis, data visualization, and data reporting.
5. Evaluate data dictionaries and data sets for compliance with governance standards.
6. Describe the concepts of managing data.
7. Manage data within a database system.
8. Analyze data within a database system using software (e.g., SQL).
9. MAJOR TOPICS:
10. Evolution of Informatics
11. Healthcare Information Systems
12. Healthcare Informatics and the Internet
13. Project Management Tools and Procedures for Health Informatics
14. Informatics Quality, Standards, and Usability
15. Informatics Governance and Organizational Structures
16. Informatics in Education
17. International Informatics Efforts
18. Ethics in Informatics
19. Research and Data Analytics Methods
20. Data Dictionaries, Data Sets
21. Managing Data
22. Data Analysis Using Specialized Software (e.g., SQL)