Informatics Fundamentals 2023-2024 Catalog

[ARCHIVED CATALOG]

INFM 109 - Informatics Fundamentals

PREREQUISITES: Demonstrated readiness for College level English
PROGRAM: Informatics
CREDIT HOURS MIN: 3
LECTURE HOURS MIN: 3
DATE OF LAST REVISION: Fall, 2020

Introduces the student to terminology, concepts, theory, and fundamental skills used to implement information systems and functions in a wide variety of applications from small to enterprise organizations. Topics include the history of and trends in computing, operating systems, database technology, security, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will apply technical writing and effective presentation skills through completing a research project.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Discuss different aspects of the nature of information from a human and mechanical standpoint.
2. Demonstrate awareness of the history of computing.
3. Demonstrate a working knowledge of computer hardware basics.
4. Demonstrate ability to use the available productivity software.
5. Illustrate knowledge of research, technical writing, and effective presentations.
6. Demonstrate a knowledge of Software, different categories, and how it is developed.
7. Understand cloud computing, virtualization, and the Internet.
8. Discuss the basic use of data visualization, statistics and reporting within an organization.
9. Discuss the concepts of logical and physical data storage as they apply locally and in the cloud, including the use of database structures and storage area network technology.
10. Explain the fundamental concepts of an information system, including the life cycle, components and flow of information within an organization.
11. Summarize how informatics can support the organization.
12. Discuss the importance of security within informatics, including its application in various aspects of the computing disciplines.
13. Discuss the importance of ethics, bias, and effective dissemination of technological knowledge.

COURSE CONTENT: Topical areas of study include -

- Information Literacy
- Nature of information
- Productivity Software
- Technical Writing
- Effective Presentations
- History of computing
- Operating systems

- Networking
- Working in Teams
- Cloud Computing
- Storage technologies
- Storage techniques
- Internet basics
- Security
- System Development Life Cycle
- Information Systems Fundamentals
- Database Technology
- Data Analytics
- Software Development
- Portfolio, LinkedIn, & GitHub

Course Addendum - Syllabus (Click to expand)
