Miami Dade College

Course Description

ISM4011 | Management Information Systems | 3.00 credits

The student will use information technology software to assist in making decisions of a business nature. The course will examine the use of computer systems and information technology and their applications to make more effective business decisions. The course will include the latest terminology, techniques, and applications of information systems in a business organization. Pre-requisites: CGS1060C, Senior status, or permission by department chair is required. Must pass course with a grade of "C" or higher

Course Competencies:

Competency 1: The student will apply the principles of Management Information Systems to enhance business processes and support decision-making, and demonstrate this by:

1. Selecting and discussing current MIS trends, determining how leading organizations are using them, and how they can be applied in different situations
2. Identifying, analyzing, and proposing possible information systems solutions to organizational problems and determining if technology is the best approach to address them
3. Using critical thinking skills to solve real or hypothetical business problems involving information technology theories, concepts, methods, and terminology
4. Justifying the business case for an investment in information technology
5. Identifying the relationship between data, information, and knowledge regarding an organization's mission, goals, and strategies

Competency 2: The student will develop a strategy to gain a competitive advantage using information technology and demonstrate this by:

1. Analyzing business competitors using Michael Porter's model and devising a technology-based strategy to outperform them
2. Demonstrating how leading organizations use technology as a strategy component
3. Combining a general strategy, a technology, and a business need
4. Determining when a process improvement might be a more suitable solution than a technology-based one
5. Assessing the impact of technological changes in the global markets

Competency 3: The student will justify the selection and application of a Business Intelligence solution to support decision-making and demonstrate this by:

1. Distinguishing between business intelligence tools, applications, and systems
2. Discussing and recommending the use of different data mining techniques
3. Developing a business intelligence application using commonly available tools such as Excel
4. Performing a decision tree analysis as a method of prediction
5. Comparing alternate decisions and assessing their value to the organization

Competency 4: The student will assess different types of systems and decide on what type of business problems they can be best applied, and demonstrate this by:

1. Assessing the economic factors that favor and hamper different systems
2. Demonstrating the structure and characteristics of supply chains and explaining significant supply chain problems
3. Describing how information systems can enhance supply chain performance
4. Identifying the role of information systems in supplier relationship management (SRM) and comparing the features and functions of various SRM software
5. Creating the role of information systems in customer relationship management (CRM) and comparing the features and functions of various CRM software

6. Comparing the different types of collaboration systems and summarizing their benefits and challenges
7. Evaluating and participating in a real-world C2C e-commerce market space

Competency 5: The student will demonstrate the ability to use database technology to solve organizational problems by:

1. Explaining the essential components of database systems
2. Planning and preparing the structure and content of a database system based on business needs
3. Creating, interpreting, and validating entity-relationship models
4. Rearranging data tables into the proper normal forms
5. Creating a complete database solution

Competency 6: The student will evaluate known threats to information systems and propose controls to mitigate their risk and demonstrate this by:

1. Evaluating and identifying common threats to information systems and evaluating how these threats can impact business
2. Demonstrating the types of security problems, including those created by employees
3. Establishing the manager's role in addressing security threats and drafting policies to address the issues
4. Planning organizational response to security incidents
5. Describing an organization's governance structure of the MIS functional area

Competency 7: The student will demonstrate an understanding and appreciation of ethical principles as applied to management information systems by:

1. Identifying new ethical challenges presented by technological challenges
2. Conducting an ethical analysis of an information systems issue and writing a responsible action plan
3. Comparing the effects of industry standards, government regulations, and laws on an MIS functional area's governance, processes, and services

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information