



## Course Number and Title: MIS 220 Management Information Systems

**Campus Location:**

Georgetown, Dover, Stanton, Wilmington

**Effective Date:**

2021-51

**Prerequisite:**

CIS 107, ((MGT 212 or concurrent) or LOM 100)

**Co-Requisites:**

None

**Course Credits and Hours:**

3.00 credits

3.00 lecture hours/week

1.00 lab hours/week

**Course Description:**

This course presents essential information systems concepts and practices required to manage a modern organization. Topics focus on how information systems are causing changes in the organization and the operations of businesses and how information systems can increase the competitiveness of a business.

**Required Text(s):**

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

**Additional Materials:**

None

**Schedule Type:**

Classroom Course

Video Conferencing

Web Conferencing

Hybrid Course

Online Course

**Disclaimer:**

None

**Core Course Performance Objectives (CCPOs):**

1. Describe management information systems. (PGC ACC 5; GBT 2; LOM 6)
2. Explain business decisions and the evaluation of business processes. (CCC 2; PGC ACC 5; GBT 2, 3; LOM 2, 6)
3. Describe e-business, and identify disruptive, emerging technologies. (CCC 2, 5; PGC ACC 5; GBT 2; LOM 2, 6)
4. Explain ethics and information security. (CCC 4; PGC ACC 4, GBT 1; LOM 4)
5. Explain technology infrastructures, data, information, and business intelligence. (CCC 2; PGC ACC 5; GBT 2, 3; LOM 6)
6. Describe enterprise applications, and explain systems development and project management. (CCC 2; PGC ACC 5; GBT 2; LOM 2,6)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

## Measurable Performance Objectives (MPOs):

Upon completion of this course, the student will:

1. Describe management information systems.
  1. Describe the information age and the differences among data, information, business intelligence, and knowledge.
  2. Identify the different departments in a company, and explain why they must work together to achieve success.
  3. Explain systems thinking and how management information systems enable business communications.
  4. Explain why competitive advantages are temporary.
  5. Describe Porter's Five Forces model, and explain each along with their strategies.
  6. Demonstrate how a company can add value by using Porter's value chain analysis.
2. Explain business decisions and the evaluation of business processes.
  1. Explain the importance of decision-making for managers at each of the primary organization levels along with the associated decision characteristics.
  2. Define critical success factors (CSFs) and key performance indicators (KPIs), and explain how managers use them to measure the success of management information systems (MIS) projects.
  3. Classify the different operational support systems, managerial support systems, and strategic support systems, and explain how managers can use these systems to make decisions and gain competitive advantages.
  4. Describe artificial intelligence, and identify its five main types.
  5. Explain the value of business processes for a company, and differentiate between customer-facing and business-facing processes.
  6. Demonstrate the value of business process modeling, and compare as-is and to-be models.
  7. Differentiate among automation, streamlining, and reengineering.
  8. Describe business process management and its value to an organization.
3. Describe e-business, and identify disruptive, emerging technologies.
  1. Compare disruptive and sustaining technologies, and explain how the Internet and the World Wide Web caused business disruption.
  2. Describe e-business and its associated advantages.
  3. Describe e-business tools for connecting and communicating.
  4. Identify challenges associated with e-business.
  5. Explain Web 2.0, and identify its four characteristics.
  6. Explain how Business 2.0 is helping communities network and collaborate.
  7. Describe the three Business 2.0 tools for collaborating and explain potential challenges.
  8. Describe Web 3.0 and the next generation of online business.
4. Explain ethics and information security.
  1. Explain the ethical issues in the use of information technology.
  2. Identify the e-policies organizations should implement to protect themselves.
  3. Describe the relationships and differences between hackers and viruses.
  4. Describe the relationship between information security policies and an information security plan.
  5. Provide examples of primary information security areas including: (1) authentication and authorization, (2) prevention and resistance, and (3) detection and response.
5. Explain technology infrastructures, data, information, and business intelligence.
  1. Explain MIS infrastructure and its three primary types.
  2. Identify the primary areas associated with an information MIS infrastructure.
  3. Describe the characteristics of an agile MIS infrastructure.
  4. Identify the environmental impacts associated with MIS.
  5. Explain the components of a sustainable MIS infrastructure along with their business benefits.
  6. Explain the primary traits that determine the value of information.
  7. Describe and identify the business advantages of a database, a database management system, and the relational database model.
  8. Analyze data and solve business problems using an Access database.
  9. Explain the business benefits of a data-driven website.
  10. Define *data warehouse*, and provide a few reasons how it can make a manager more effective.
  11. Explain the process of extract, transform, and load (ETL) and the role of a data mart in business.
  12. Define *data mining*, and explain the three common forms for mining structured and unstructured data.
  13. Identify the advantages of using business intelligence to support managerial decision-making.
  14. Explain the different networking elements that create a connected world.
  15. Identify the benefits and challenges of a connected world.
  16. Describe the different wireless network categories.
  17. Explain the different wireless network business applications.
  18. Identify the benefits and challenges of business mobility.
6. Describe enterprise applications, and explain systems development and project management.
  1. Explain integrations and the role they play in connecting a corporation.
  2. Describe supply chain management along with its associated benefits and challenges.
  3. Describe customer relationship management along with its associated benefits and challenges.
  4. Describe enterprise resource planning along with its associated benefits and challenges.
  5. Describe the phases of the systems development life cycle.
  6. Summarize the different software development methodologies.
  7. Explain project management, and identify the primary reasons projects fail.
  8. Identify the primary project planning diagrams.
  9. Identify the different types of outsourcing along with their benefits and challenges.

**Evaluation Criteria/Policies:**

The grade will be determined using the Delaware Tech grading system:

90	-	100	=	A
80	-	89	=	B
70	-	79	=	C
0	-	69	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

**Final Course Grade:**

Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Summative (Equally Weighted): Exams (3-5)	50%
Summative: Excel and Access Project	20%
Formative: Exercises, Quizzes, Discussion Boards	30%
TOTAL	100%

**Core Curriculum Competencies (CCCs are the competencies every graduate will develop):**

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

**Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):****Accounting (ACT):**

1. Prepare and analyze financial statements in accordance with Generally Accepted Accounting Principles.
2. Analyze data to process information for decision-making under a product and job costing system.
3. Apply tax laws to the preparation of tax returns and to tax plans.
4. Integrate professional, ethical, and legal standards into business practice.
5. Employ the various theories of management and marketing in a business.

**General Business (GBT):**

1. Integrate professional, ethical and legal standards into business practice.
2. Employ the various theories of management and marketing in a business.
3. Apply the principles of human resource management to organizations.
4. Evaluate the actions taken to acquire and retain customers.
5. Measure and track financial performance of an organization.
6. Analyze and apply the strategic management process to organizations.

**Logistics, Supply Chain, and Operations Management (LOM):**

1. Analyze logistics, supply chain, and operations processes to provide assistance in the development of quality, customer service, and cost improvement alternatives.
2. Utilize various statistical quality control techniques to aid in the development and use of global quality logistics, supply chain, manufacturing, and service applications.
3. Apply integrated technology-driven information necessary for logistics, supply chain, and operations.
4. Perform cost analysis on proposed logistics, supply chain, and operations projects, and make data-driven investment recommendations to management.
5. Develop and optimize logistics and operations business processes, including job design and workplace layout.
6. Apply management functions, statistical quality and process applications, planning and scheduling techniques, and related software applications necessary for successful business decision-making.
7. Apply managerial accounting, economics, human resources, and marketing principals when making workplace decisions.

**Disabilities Support Statement:**

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.