HEALTHCARE ADMINISTRATION AND INFORMATION SYSTEMS

Chair: Dr. David Jordan
Secretary: Michele Orr
Location: 110 Eisenberg Classroom Building
Department: 724-738-4865

Courses

BUSA Courses

**BUSA 130 - Dynamics of Global Commerce**
Exploration of the challenges of business operations in the global market place. Topics discussed include the business, economic, social, and political aspects of the global market place. This may include, but not be limited to, topics such as e-commerce, entrepreneurship, sustainability and business ethics.

Credits: 3
Term(s) Typically Offered: Offered Summer & Winter Terms
Thematic Thread(s): International Business, Transfer Thread Completion Course

**BUSA 139 - University Seminar**
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

**BUSA 190 - Experimental**
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

**BUSA 195 - Workshop**
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

**BUSA 198 - Selected Topics**
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

**BUSA 290 - Experimental**
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

**BUSA 295 - Workshop**
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed

**BUSA 298 - Selected Topics**
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

**BUSA 303 - Issues in Global Business**
This course will focus on fundamental issues in the modern globalization of business. The topics covered will include the cultural environments in which business work, politics and law in global business, economic integration, global trade and investment, global finance, global operations and managing global businesses. A special emphasis will be placed on the challenges and opportunities presented to global businesses by the social, political and economic diversity encountered in the global marketplace.

Prerequisites: ECON 201D and ECON 202D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Every Term
Thematic Thread(s): Global Citizenship, International Business, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

**BUSA 315 - Economics of Sustainable Development**
Economic causes and effects of pollution are discussed along with the issue of sustainable economic development. Government policy with respect to the environment and renewable energy will be surveyed. The framework connection between sustainability and the core functions of business for profit in the global economy will be presented.

Prerequisite: ECON 202D
D Requires minimum grade of D.
Credits: 3
Thematic Thread(s): Sustainable International Development, Sustainability, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
BUSA 340 - Legal Environment of Business
A study of the various processes available to resolve business disputes and an exploration of complex legal relationships that affect business, including contracts, business formations, employment, and torts and consumer law.

Credits: 3
Term(s) Typically Offered: Offered Every Term
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 370 - Sustainable Entrepreneurship and Innovation
This integrative course introduces students to issues related to sustainable new venture creation. It includes topics such as the importance of innovation and creativity in opportunity recognition and the design of sustainable business models, industry/market analysis, resource acquisition and disposition, assessing a venture's financial strength, and ethical legal issues. Students will learn the entrepreneurial process while acknowledging multiple stakeholders and addressing social, economic and environmental concerns.

Prerequisites: FIN 320\(\text{D}\) and MGMT 351\(\text{D}\) and MRKT 330\(\text{D}\)
\(\text{D}\) Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall & Winter Terms
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 395 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 398 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 451 - Employment Law
This course covers the law as it applies to all aspects of the employer-employee relation, including union activity, discrimination, selection, testing and employment contracts.

Prerequisites: MGMT 351\(\text{D}\) or MGMT 250\(\text{D}\) or MGMT 251\(\text{D}\)
\(\text{D}\) Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 459 - Sustainable Business Consulting
In this course student teams engage in field-based consulting to analyze actual problem situations involving sustainability for regional businesses.

Credits: 3
Term(s) Typically Offered: Offerings Vary
Thematic Thread(s): Innovation, Entrepreneurship, and Positive Change, Transfer Thread Completion Course
Enrollment limited to students with a semester level of Senior 1 or Senior 2.

BUSA 490 - Independent Study
Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 495 - Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format, and on a timely topic.

Credits: 1-6
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

BUSA 498 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
HCAM Courses

HCAM 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

HCAM 190 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

HCAM 195 - Health Care Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

HCAM 198 - Selected Topics
The in-depth examination of a specific topic. the nature of the topic selected and its treatment determined in consultation with the instructor.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed

HCAM 230 - US Healthcare Systems
This course offers an overview of the U.S. healthcare delivery system and challenges that confront the industry. It examines legal, technological, economic, political, ethical, and social forces that impact the healthcare industry. Students will learn about the delivery of healthcare services in various settings, as well as the role of government, professional agencies, and other industry related organizations. The allocation of scarce healthcare resources is examined through the lenses of social awareness, civic responsibility, and quasi-market forces. This course also equips students to become informed healthcare consumers and introduces them to healthcare employment opportunities.

Credits: 3
Term(s) Typically Offered: Offered Fall & Spring Terms, Offered Summer Terms Odd, Offered Winter Terms Odd
Thematic Thread(s): 21st Century Healthcare, Being American, Transfer Thread Completion Course

HCAM 250 - Medical Terminology for Healthcare Administrators
This course is designed to provide students with a basic understanding of medical language. Emphasis is placed on basic medical word construction and language derivation related to health care.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Thematic Thread(s): 21st Century Healthcare, Transfer Thread

HCAM 265 - Managed Care & Insurance
This course examines Managed Care Organizations, insurance plans, Consumer Directed Health Care plans and Health Care Exchanges. Students will explore the influence of managed health care and the various forms of health care insurance on the organization and delivery of health services in the United States are explored.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall, Spring, & Summer, Offered Summer Terms Odd

HCAM 275 - Health Care Legal & Ethical Foundations
This course connects theoretical foundations of ethics with practical legal issues facing health care leaders. The course will define the role of the health care provider, payer, consumers, delivery systems, and regulatory bodies in addressing challenges presented by health care law and ethics.

Credits: 3
Term(s) Typically Offered: Offered Fall & Spring Terms, Offered Summer Terms Even
Thematic Thread(s): 21st Century Healthcare, Transfer Thread

HCAM 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

HCAM 295 - Health Care Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

HCAM 298 - Selected Topics
The in-depth examination of a specific topic. The nature of the topic selected and its treatment are determined in consultation with the instructor.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 300 - Healthcare Systems: Global Perspectives and Analysis
This course examines health care systems from other countries in contrast to the United States system of health care. Students will be introduced to larger global perspectives about healthcare systems. Comparisons of healthcare systems' infrastructures, finance systems, level of government involvement, and key metrics of health outcomes will be discussed along with the interconnected socio-political issues across diverse populations.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offered Summer Terms Odd
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 332 - US Health Care Policy
This course provides an overview of US health care policy in the postwar period. The course will examine the problems of health care costs, access, and quality in depth, consider alternative approaches to health care reform and use a comparative method to examine the health policies of other advanced industrialized countries. In addition, the course aims to introduce students to health policy analysis as an applied social science discipline.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 335 - Current Topics in Health Care
This course examines current topics in healthcare from the interests of various constituencies and organizations. It is designed to introduce students to the identification and study of current economic, regulatory or operational issues and emerging trends impacting the healthcare industry. Matters of healthcare policy, healthcare reform, current clinical and non-clinical healthcare developments, policy process and advocacy will also be examined.

Credits: 3
Term(s) Typically Offered: Offered Summer Terms Odd, Offered Winter Terms Odd
Thematic Thread(s): 21st Century Healthcare, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 360 - Healthcare Organizational Dynamics
This course introduces concepts associated with organizational dynamics in the healthcare industry. Students will examine content from individual, team, and organizational perspectives. Organizational dynamics are examined to provide a better understanding of how to deliver value within a competitive and changing healthcare industry.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms, Offered Summer Terms Even, Offered Winter Terms Even
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 380 - Healthcare Value-Based Reimbursement Systems
This course examines payment reform in the healthcare industry, focusing on the shift to value-based reimbursement systems. Students will gain a basic understanding of data sources, the requirements to prepare data for analysis to develop practical applied insights, and the importance of integrating such into healthcare organizational workflows. Students will be able to apply their understanding of the challenges and requirements of performance metrics and systems information in a healthcare environment and learn methods used to improve value in healthcare services through leveraging data and information.

Prerequisites: HCAM 230D and HCAM 265D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

HCAM 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 395 - Health Care Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely topic.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

HCAM 398 - Selected Topics
The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed

HCAM 400 - Legal Environment of Healthcare
This course acquaints future healthcare managers with legal issues needed to engage with the government, patients, healthcare employees, and contractors. The course is taught from the manager's perspective, rather than the lawyer's perspective, with an emphasis on a wide variety of legal concepts, terms and common-sense tips for avoiding legal trouble, rather than on attorney-level legal analysis.

Prerequisites: (ACCT 340D or BUSA 340D) and HCAM 275D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms Even, Offered Spring Terms, Offered Winter Terms Odd
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.
HCAM 405 - Health Care Quality & Process Improvement
This course examines a systems approach to continuous improvement processes in healthcare settings. Quality and process concepts and theories examined in this course are guided by data and processes at the unit and organization levels that reach beyond regulatory and accreditation compliance.

Prerequisites: HCAM 230D and (HCAM 360D or MGMT 351D) and HCAM 265D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

HCAM 410 - Strategic Leadership in Health Care Organizations
This course will examine leadership principles necessary to be effective in a continuously changing health care industry. Concepts covered include cultural competency, patient and family centered care, community outreach, coalition building, teamwork effectiveness, and leading within an environment of change in the US health care system.

Prerequisites: HCAM 230D and (HCAM 360D or MGMT 351D)
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

HCAM 415 - Marketing for Health Care Organizations
This course covers the application of marketing concepts, tools and techniques to marketing problems, emphasizing strategic thinking and analysis in a healthcare environment. Students will gain a perspective on how a healthcare marketing function links to the overall business system.

Prerequisites: HCAM 230D and (HCAM 360D or MGMT 351D) and MRKT 330D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

HCAM 425 - Long Term Care Management
This course will examine long-term care organizations and care in the United States. Students examine external and internal long-term environments, the organization and delivery of services, administration, management, and leadership of long-term care organizations.

Prerequisites: HCAM 230D and (HCAM 360D or MGMT 351D) and HCAM 265D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Sophomore 1 or Sophomore 2 may not enroll.

HCAM 430 - Finance for Healthcare Organizations
This course is designed to build on accounting and financial management strategies used in profit and not-for-profit healthcare organizations. It will expose students to the practical application and theoretical constructs necessary to manage finances in a variety of healthcare organizations.

Prerequisites: HCAM 230D and ACCT 209D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 450 - Internship-Health Care Administration & Management
This internship provides students with an opportunity to apply theory to practice and develop competencies through a work-related experience in a profit, or not-for-profit healthcare related organization.

Prerequisites: HCAM 230D and HCAM 360D and HCAM 265D and HCAM 400D and HCAM 405D (may be taken concurrently).
D Requires minimum grade of D.
Credits: 3-12
Term(s) Typically Offered: Offered Summer & Winter Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 490 - Independent Study
In-depth reading and/or research with the guidance of a faculty member in an area selected by the student. Prerequisites: 12 credits in major courses, application and permission of the instructor, departmental chairperson and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

HCAM 495 - Health Care Workshop
A workshop is a program which is usually of short duration, narrow in scope, often non-traditional in content and format and on a timely basis.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-6
Term(s) Typically Offered: Offered as Needed

HCAM 498 - Selected Topics
The in-depth examination of a specific topic. The nature of the topic selected and its treatment determined in consultation with the instructor.

Prerequisite: HCAM 230D
D Requires minimum grade of D.
Credits: 1-3
Term(s) Typically Offered: Offered as Needed
HCAM 499 - Health Care Theory and Research Capstone Seminar
This course examines health care theories that focus on the key concepts of individual and population health, access to health care, cost of health care, quality of health care and health care organization structures and processes. Students will research areas of interest based on these theoretical concepts.

Prerequisites: HCAM 230\textsuperscript{D} and HCAM 360\textsuperscript{D} and HCAM 400\textsuperscript{TD} and HCAM 405\textsuperscript{D} (may be taken concurrently).

\textsuperscript{D} Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms
Students with a semester level of Freshman 1, Freshman 2, Junior 1, Junior 2, Sophomore 1 or Sophomore 2 may not enroll.

MIS Courses

MIS 139 - University Seminar
University Seminar serves as the entry point to the Slippery Rock University general education program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and academic excellence. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3

Term(s) Normally Offered: As Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES STUDENT attribute.

MIS 190 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: As Needed

MIS 198 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: As Needed

MIS 210 - Productivity Software
An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Prerequisites: CPSC 100\textsuperscript{D} or CPSC 110\textsuperscript{D} or CPSC 099\textsuperscript{D} or CPSC 130\textsuperscript{D} or minimum score of 01 in 'Computer Competency Exam'

\textsuperscript{D} Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Every Term

MIS 211 - Information Systems Application Development
The purpose of this course is to introduce the students to the fundamental concepts and models of application development so that they can understand the key processes related to building functioning applications and appreciate the complexity of application development. Students will learn the basic concepts of program design, data structures, programming, problem solving, programming logic and fundamental design techniques for event-drive programs. Program development will incorporate the program development life cycle: gathering requirements, designing a solution, implementing a solution in programming language and testing the completed application.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms

MIS 265 - Management Information Systems
Managerial and technological issues that are necessary to understand, establish, manage and use information systems in all functional areas of organizations.

Prerequisites: CPSC 210\textsuperscript{D} or MIS 210\textsuperscript{D}

\textsuperscript{D} Requires minimum grade of D.

Credits: 3

Term(s) Typically Offered: Offered Fall & Spring Terms

MIS 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3

Term(s) Typically Offered: As Needed

MIS 298 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3

Term(s) Typically Offered: As Needed

MIS 300 - Challenges of Computer Technology
An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3

Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): The Future, Transfer Thread Completion Course
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
MIS 301 - Practical Computer Security
A practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC 099D or CPSC 110D or CPSC 130D or CPSC 100P
D Requires minimum grade of D.
P Requires minimum grade of P.
Credit: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 310 - Business Data Analysis and Visualization
This course covers how data analysts can design data sets from a variety of sources to create information that guides leaders in crafting strategy and tactics which allow an organization to survive and thrive in a turbulent environment. Students will review how business data analysis has been successfully used in the past and learn appropriate processes and a variety of techniques to accomplish effective analyses. Emphasis is on analyzing data, visualizing and interpreting the results of those analyses and translating results into clear and simple insights to aid managerial decision making.

Prerequisites: MIS 210C or STAT 152C
C Requires minimum grade of C.
Credit: 3
Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

MIS 323 - Data Base Systems
Database Systems is a study of relational database concepts as applied to comprehensive information systems. These concepts include data design; modeling; normalization; the use of Structured Query Language (SQL) to define, manipulate and test the database; programmatic access to a database; and practical issues faced by database developers.

Prerequisites: CPSC 130D or CPSC 146D or CPSC 210D or MIS 210D
D Requires minimum grade of D.
Credit: 3
Term(s) Typically Offered: Offered Fall & Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
Students cannot enroll who have a program in Information Systems.

MIS 328 - Exploring Big Data for Business I
Due to the explosion of social media and the computerization of every aspect of social and economic activity, large volumes of structured and unstructured data currently exist. They include weblogs, videos, speech recordings, photographs, health data, e-mails, Tweets and business data. Also, improvements in technology have led to the development of powerful computers that can store and process large volumes of data. This course is to introduce students to the essential information systems and technologies used in manipulating, storing, and analyzing big data. Students will be familiar with highly scalable systems that can be used to accept, store, and analyze large volumes of unstructured data in batchmode and/or real-time.

Prerequisites: MIS 210C and (ECON 219C or MGMT 219C) and (MIS 323C or CPSC 323D)
C Requires minimum grade of C.
Credit: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students in the College of Business college.

MIS 333 - Introduction to Computer Forensics
This is a fundamental course which covers computer forensics. This class covers methods and tools for gaining forensic information from computer systems and networks. It includes case studies of cyber crimes as well as the application and management of cyber forensics. The course introduces students to forensic tools using hands-on experience and the Internet.

Prerequisites: CPSC 099P or CPSC 100D or CPSC 110D or CPSC 130D or CPSC 210D or MIS 210D or PE 202D
P Requires minimum grade of P.
P Requires minimum grade of D.
P Requires minimum grade of D.
Credit: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 353 - Business Data Communications and Technologies
This course provides an introduction and overview of computer networks and data communications. It provides an understanding of the underlying concepts of computer networking, email, instant messaging (e.g. texting, multimedia messaging). Introduces several software packages used in business data communications. Emphasis is placed on terminology, techniques and issues in business data communications.

Prerequisites: CPSC 210D or MIS 210D
D Requires minimum grade of D.
Credit: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a “one time only” basis and not as a permanent part of the department’s curriculum.

Credit: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.
MIS 398 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 401 - Information Systems Security
This course covers key bodies of knowledge and specializations in security and privacy associated with information systems. The course explores the management of various technologies in emerging areas of information assurance including computer and network security, digital forensics, cryptography and biometrics. Course concepts include information assurance, information security governance and risk management, operations security, cryptography, access control, physical security, telecommunications security, business continuity and disaster recovery planning, legal and ethical issues.

Prerequisites: CPSC 301D or MIS 301D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 403 - Introduction to Healthcare Information Systems
This course will give an introduction to computer-based information systems as they are applied to the health care industry. Topics will include characteristics of health care data, design and life cycle of HCIS, the information technology supporting HCIS and management issues.

Prerequisites: CPSC 210D or MIS 210D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 413 - Systems Analysis
A course in computer-based information systems. Course content includes: foundations of information science, techniques for system development, information architectures, and resource allocations. Case studies are discussed and utilized as class projects.

Prerequisites: CPSC 323D or MIS 323D
D Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 423 - Advanced Business Database Systems
This course will provide students with advanced skills in database implementation and management with a focus on business systems. It will provide students with a hands-on experience of client-server databases, and the skills to develop one using reputable enterprise relational database management system. They will develop knowledge of creating, querying and maintaining relational database. Students will also learn to use advanced Structured Query Language (SQL) extensively to create integrated business systems to access, retrieve and manipulate business data. Students taking this course are expected to have a basic understanding of relational database concepts, and knowledge of a programming language.

Prerequisite: MIS 323C
C Requires minimum grade of C.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Healthcare Adm & Info Systems.

MIS 428 - Exploring Big Data for Business II
This course focuses on Big Data tools and technologies. It is for students who want to become conversant with the terminology and the core concepts behind big data problems, applications, and systems. It is for those who want to start thinking about how utilizing big data might be useful in their business or career. Students will gain skills to implement data-driven approach to decision-making, develop big data solutions to create business intelligence and competitive advantage through the use of analytical techniques and Big Data.

Prerequisites: MIS 210D and (ECON 219D or MGMT 219D) and (MIS 323D or CPSC 323D) and MIS 328D
D Requires minimum grade of D.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Healthcare Adm & Info Systems.

MIS 443 - Exploring Big Data for Business I
This course focuses on Big Data tools and technologies. It is for students who want to start thinking about how utilizing big data might be useful in their business or career. Students will gain skills to implement data-driven approach to decision-making, develop big data solutions to create business intelligence and competitive advantage through the use of analytical techniques and Big Data.

Prerequisites: MIS 210D and (ECON 219D or MGMT 219D) and (MIS 323D or CPSC 323D)
D Requires minimum grade of D.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.
Enrollment limited to students with department of Healthcare Adm & Info Systems.

MIS 443 - Project Management
An introduction to project management in the information systems, or IT development, area. Provides an understanding of the purpose, methods and benefits of process management by exposing the student to the concepts, practices, processes, tools and techniques used in process management for software development.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.
MIS 450 - Internship
Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 453 - Fundamentals of Enterprise Architecture
This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and their fit with the hosting organization.

Prerequisites: MIS 323\textsuperscript{D} and MIS 413\textsuperscript{D}
\textsuperscript{D} Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 490 - Independent Study
Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.

MIS 498 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may not enroll.