Management Information Systems
GS/DMGM5050 A
(Fall 2025)

Course Outline

Class: Thu, 7:00–10:00 pm.
Location: In-Class, MK 6015, Markham

This course is taught ***in class, in person***, as identified in the course schedule.

Special Notes:
COVID

Everyone is expected to follow the University's guidelines about *COVID-19 protocols, precautions, masks, and vaccinations*.

If you are sick and have any COVID-19 symptoms, do not come to class.

We will work with you to make sure you can learn any material you miss. If you miss an extended amount of time because of illness, contact me to discuss your options.

For our classroom to be a safe and comfortable place to learn, we all need to act with patience, compassion, and the recognition that our actions (and inactions) affect one another and the lives of those around us. Please be considerate and respectful as we navigate living and learning during the semester.

Course Instructor Contact

Instructor: Marius Dobre
Email: mdobre@yorku.ca
Office Hours: Online by appointment only

Calendar Description / Prerequisite / Co-Requisite

This course is intended to prepare students to become effective users of information systems and to offer references on the decision making for information technology investments meant to optimize the performance of the firm.

The course covers the fundamentals of information systems, and includes concepts used in the major functional areas of an enterprise, with the purpose to present a comprehensive, yet concise perspective of how information systems are not anymore, a tool but a strategic component of the enterprise structure.

The course reviews the information systems from a business perspective, as used to manage the enterprise and includes digital systems, architecture and infrastructure, sourcing, IT project management, security, and ethics issues.

Prerequisites: As determined in the graduate diploma admission requirements.

Course Highlights

We meet each week, and we combine lectures with group work in support to your assignments. There is no time to waste as the assignments require sustained research and group interaction.

Information Systems are a critical resource for many of today's businesses and it is one of the largest capital expenditures of a firm.

DMGM 5050—Management Information Systems, offers an integrated perspective on how information systems are an integral part of an enterprise dealing with the contemporary dynamic business environment.

Course Objectives

The purpose of this course is to provide an overview of the role of information systems in today's organizations and business environment.

Specifically, upon completing this course, you should be able to:

1. Practice and effectively use IT (information technology) terminology in oral and written business management communication.
2. Explain the business benefits of information management and understand the importance of data governance and master data management in providing trusted data that is available when and where needed to support sustainability.
3. Explain the main managerial processes and risks related to IT systems including information systems governance, planning, systems development, and security.

4. Provide examples of different types of IS (information systems) that a company could use and how they could be used.
5. Discuss the use of IS to accomplish an organization's goals and to gain a competitive advantage and provide examples of competitive strategies that could be used by types of organizations.
6. Discuss ethical and privacy issues related to IT. Explain how privacy legislation affects organizations and how they respond to such legislation.
7. Practice problem solving using cases.

Weighting of Course

Description	Value
Class / Home work **Participation:** Attendance (5%), punctuality, opinions, active role, be prepared, ask questions (5%)	**10%**
Tests Multiple choice tests on eClass: **Session 2, 3, 4, 5 and 6 (10% for each test)**	**50%**
Final Exam **Take Home Exam** **Cumulative: Covering Sessions 1–6**	**40%**
Total	100%

Examinations and Assignments

Notes about grades and attendance
It is extremely important for students to attend lectures, to ask questions and to work at a sustained pace given the short duration of this course.

Class Preparation
The complexity of course topics and the pace with which they will be covered imply that students who are absent or unprepared for lectures and case assignments will fall behind. The prevailing expectation is always that students have read assigned materials prior to lectures and are prepared to discuss the major concepts and issues raised by assigned readings.

Grading
The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ - 7, C+ = 5, etc.). Assignments and tests will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.)
(For a full description of York grading system see the York University Undergraduate Calendar–calendars.students.yorku.ca/2025-2026/grades-and-grading-schemes

Participation
Attendance, punctuality, opinions, active role, be prepared, ask questions, respond questions asked from the reading material. It is extremely important to be present in the class. That will grant 50% of your participation mark. The other 50% will come from your class interventions on every weekly case, as questions, contributions and topics discussions in the class.

In Class Tests
Will be written using the course eClass environment. The format of the questions will be Multiple Choice. Time for tests will be 1 minute per question.

Missed Tests
Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g., doctor's letter) may request accommodation from the Course Director. If approved, a make-up test date / time will be scheduled as soon as possible. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Week	Session	Topic	Activity
1 Sep 4	1	*In class session* ***Introduction, IS Strategy and Strategic uses of IS resources*** Learning Objectives – Understand the case for managers to participate in decisions about IS and what skills are needed. – Describe the Information Systems Strategy Triangle and the alignment necessary between decisions regarding business strategy, information systems, and organizational design. – Explain models of business strategy, organizational strategy and design, and information systems strategy. – Understand the concept of building competitive advantage using information systems-based applications. – Show how strategic advantage may be sustained considering competitive barriers and how to gain and maintain strategic advantage through information and other resources of the firm. – Describe strategic alliances, co-opetition, risks of strategic use of IT, and cocreating IT and business strategy.	Chapter 1, Chapter 2 Case Study 2-1: Instacart: Gaining Strategic Advantage During a Pandemic In class discussion

Week	Session	Topic	Activity
2 Sep 11	2	*In class session* ***Business Intelligence, Knowledge Management, and Analytics****I* Learning Objectives: – Explain how business intelligence and analytics have become a source of strategic advantage for those firms who understand and develop skills to manage big data. – Understand how to build capabilities in knowledge management, business intelligence, and analytics. – Define and discuss what is data, information, and knowledge (both tacit and explicit) as they compose the foundation of making better decisions. – Describe the four main processes used to manage Knowledge – Explain the components of business analytics and big data amassed in data warehouses. – Discuss the Internet of Things, social media analytics, and caveats that managers must anticipate.Learning Objectives: – Explain how business intelligence and analytics have become a source of strategic advantage for those firms who understand and develop skills to manage big data. – Understand how to build capabilities in knowledge management, business intelligence, and analytics. – Define and discuss what is data, information, and knowledge (both tacit and explicit) as they compose the foundation of making better decisions. – Describe the four main processes used to manage Knowledge – Explain the components of business analytics and big data amassed in data warehouses. – Discuss the Internet of Things, social media analytics, and caveats that managers must anticipate.	Chapter 12 Case Study 12.2: Nest and the Internet of Things (IoT) In class discussion Test 1: In class test using eClass

Week	Session	Topic	Activity
3 Sep 18	3	*In class session* ***Design of Work, Information Systems, and Digital Transformation*** Learning Objectives: – Explain the impact technology has on the nature and design of work. – Understand how digital technology can be used effectively to make employees more effective. – Describe technologies to support communication and collaboration, new types of work, and new ways of doing traditional work. – Explain functional (silo) versus a process perspective of a firm, including agile and dynamic business processes. – Explain the way managers change business processes, including incremental and radical approaches and what is Digital business transformation. – Describe Information systems (IS) including workflow and business process management systems and enterprise systems that support and automate business processes.	Chapter 4, Chapter 5 Case Study 5-2: Carestream Health In class discussion Test 2: In class test using eClass
4 Sep 25	4	*In class session* ***Architecture, Infrastructure, and Sourcing*** Learning Objectives: – Understand the framework used to describe the basic components of architecture and infrastructure, – Explain common architectures, including centralized, decentralized, and web-based service-oriented architecture (SOA). – Describe enterprise architecture, virtualization, and cloud computing. – Understand the Sourcing Decision Cycle for IS: to make (insource) or buy (outsource) with focus on issues related to outsourcing. – Explain the decision of how and where (cloud computing, crowdsourcing, onshoring, offshoring, (far-shoring, nearshoring, or captive centers)). – Discuss evaluation of the decision, back-sourcing and obtain an understanding of the risks and strategies to mitigate risks	

Week	Session	Topic	Activity
5 Oct 2	5	*In class session* ***The Business of Information Technology*** Learning Objectives: – Explore the business of information technology (IT) and the customers it serves. – Understand the balancing act between the supply and business demand for information systems (IS), – Describe key IT organization activities and relate them to one of three maturity levels. – Explain business processes within the IT department, including building a business case, managing the IT portfolio, and valuing IT investments. – Explore a major function of the information systems (IS) organization: build and implement systems. – Define what is a project, identify key players, and describe how information technology (IT) projects are managed. – Understand and compare various system development methodologies and approaches. – Discuss two critical management areas for project success: risk management and change management.	Chapter 8 Chapter 11 Case Study 11-2: Information Displays at Dutch Railways (Nederlandse Spoorwegen) In class discussion Test 4: In class test using eClass
7 Oct 9	6	*In class session* ***Cybersecurity, Privacy, and Ethical Considerations*** Learning Objectives: – Understand how hacked systems or stolen data can put a company out of business or cause physical damage to critical infrastructure. – Explore basic concepts for managing security including security planning, governance, culture, and metrics. – Obtain lessons from some of the largest and most well-known security breaches. – Describe common tools that aim to secure access, data storage, and data transmission. – Answer the question “How secure are we?” – Understand the set of unique ethical issues related to the use and control of information and address them from various perspectives – Explain Mason's privacy, accuracy, property, accessibility (PAPA) framework for information control. – Discuss the ethical role of managers in today's dynamic world of social business and security controls to keep information safe and accurate. – Describe green computing.	Chapter 7 Chapter 13 Case Study 13-1: A TikTok Challenge In class discussion Test 5: In class test using eClass ***Final Exam due October 21st, 2025, 9:00 pm.***

Course Schedule has flexibility / topic delivery order may change according to class needs.

Additional case support material may be introduced with a minimum of one-week advance notice.

RELEVANT UNIVERSITY REGULATIONS

Deferred Exams: Deferred standing may be granted to students who are unable to write their final examination at the scheduled time or to submit their outstanding course work on the last day of classes. Details can be found at myacademicrecord.students.yorku.ca/deferred-standing. Students that are missing the regular mid-term exam, could write the make-up midterm, one week after the regular one.

Academic Honesty: The Faculty of Liberal Arts and Professional Studies considers breaches of the Senate Policy on Academic Honesty to be serious matters. The Senate Policy on Academic Honesty is an affirmation and clarification for members of the University of the general obligation to maintain the highest standards of academic honesty. As a clear sense of academic honesty and responsibility is fundamental to good scholarship, the policy recognizes the general responsibility of all faculty members to foster acceptable standards of academic conduct and of the student to be mindful of and abide by such standards. Suspected breaches of academic honesty will be investigated, and charges shall be laid if reasonable and probable grounds exist.

Students should review the York Academic Honesty policy for themselves at: yorku.ca/secretariat.

Students might also wish to review the interactive on-line Tutorial for students on academic integrity, at: spark.library.yorku.ca/academic-integrity.

Grading Scheme and Feedback Policy: The grading scheme (i.e. kinds and weights of assignments, essays, exams, etc.) shall be announced, and be available in writing, within the first two weeks of class, and, under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term, and 30% for 'full year'courses offered in the Fall/Winter Term be received by students in all courses prior to the final withdrawal date from a course without receiving a grade, with the following exceptions:
Note: Under unusual and/or unforeseeable circumstances which disrupt the academic norm, instructors are expected to provide grading schemes and academic feedback in the spirit of these regulations, as soon as possible. For more information on the Grading Scheme and Feedback Policy, please visit: yorku.ca/secretariat/policies/grading-scheme-and-feedback-policy.

In-Class Tests and Exams—the 20% Rule: For all Undergraduate courses, except those which regularly meet on Friday evening or on a weekend, tests or exams worth more than 20% will not be held in the two weeks prior to the beginning of the official examination period. For further information on the 20% Rule, please visit: secretariat-

policies.info.yorku.ca/policies/limits-on-the-worth-of-examinations-in-the-final-classes-of-a-term-policy.

Reappraisals: Students may, with sufficient academic grounds, request that a final grade in a course be reappraised (which may mean the review of specific pieces of tangible work). Non-academic grounds are not relevant for grade reappraisals; in such cases, students are advised to petition to their home Faculty. Students are normally expected to first contact the course director to discuss the grade received and to request that their tangible work be reviewed. Tangible work may include written, graphic, digitized, modeled, video recording or audio recording formats, but not oral work. Students need to be aware that a request for a grade reappraisal may result in the original grade being raised, lowered or confirmed. For reappraisal procedures and information, please visit the Office of the Registrar site at: myacademicrecord.students.yorku.ca/grade-reappraisal-policy.

Accommodation Procedures: LA&PS students who have experienced a misfortune or who are too ill to attend the final examination in an ADMS course should not attempt to do so; they must pursue deferred standing. Other students should contact their home Faculty for information. For further information, please visit: accessibility.students.yorku.ca/academic-support-accomodations.

Religious Accommodation: York University is committed to respecting the religious beliefs and practices of all members of the community and making accommodations for observances of special significance to adherents. For more information on religious accommodation, please visit: yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs.

Academic Accommodation for Students with Disabilities (Senate Policy)
The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder. For more information, please visit the Accessibility Services website at students.yorku.ca/accessibility.

York's disabilities offices and the Registrar's Office work in partnership to support alternate exam and test accommodation services for students with disabilities at the Keele campus. For more information on alternate exams and tests please visit altexams.students.yorku.ca.

Please alert the Course Director as soon as possible should you require special accommodations.

Effective Date: August 15, 2025