

IBH 2AB3
Information Systems in Management
Course Outline

Information, Marketing, Operations Area
DeGroote School of Business
McMaster University

COURSE OBJECTIVE

This course emphasizes the management of information systems. Topics include: the technical foundations of information systems, the impact of information systems on business operations and decision-making, the processes required for successful information systems implementation, and the ethical and societal concerns surrounding the use of information systems for business.

The specific objectives of this course are:

1. Develop understanding of information technology's role in the management of modern organizations.
2. Develop understanding of the interaction between information technology and human behaviour, and how this interaction can affect organizational performance.
3. Assess the effectiveness of an organization's information technology usage, and develop recommendations for improvement.

Prerequisite(s): IBH 1AA3 and registration in Level 2 of the Integrated Business and Humanities Program

INSTRUCTOR AND CONTACT INFORMATION

Section 1
Tom Francescutti
Instructor
francest@mcmaster.ca
Office: RJC
Office Hours: Before/after class

Student TA
TBD

COURSE DESCRIPTION

This course covers basic understanding and concepts on the management of information systems in organizations, as well as the ethical and societal concerns surrounding the implementation and use of business information systems. The course incorporates blended teaching and learning methods.

Topics covered include information systems and business strategy, the use of information systems for decision-making, electronic business (e.g., the use of mobile and social media technologies for business), enterprise-wide management information systems, and business concerns surrounding the use of management information systems (e.g., ethics, privacy, security) in society.

LEARNING OUTCOMES

Upon completion of this course, students will be able to:

- Explain the four functions of information technology as they relate to organizational management
 - Explain the impact that information technology and key IT processes have on organizational strategy, operations, and competitiveness
 - Discuss the importance of IT in organizational metrics, privacy, and security
 - Discuss data and data storage issues faced by organizations, including databases, data warehouses, big data, and data analytics
 - Discuss the use of information technology resources in business decision making, and evaluate the organizational characteristics that favour effective use of these resources
 - Discuss the importance of intra- and inter- organizational integration in the successful use of IT capabilities, and how this integration improves organizational success.
 - Analyze the influence of information technology on innovation and transformation at organizational and societal levels
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REQUIRED COURSE MATERIALS AND READINGS

Avenue registration for course content, readings and case materials

- <http://avenue.mcmaster.ca>

Baltzan, P. (2017). Business driven technology (7th ed.). New York: McGraw- Hill Education.

Choose one of the following options

- Connect online access
- Connect + (Print optional)
- [Link](#)
- Note – Student MUST purchase the access code to get access to Connect.

EVALUATION

Your final grade will be calculated as follows:

Components and Weights

Component	Weight
Online Quiz - Connect	10%
Participation (Case/Article Discussions)	10%
Memos	20%
Midterm - Connect	30%
Group Project Report	25%
Group Project Presentation	5%

NOTE: The use of a McMaster standard calculator is allowed during examinations in this course. See McMaster calculator policy at the following URL:

www.mcmaster.ca/policy/Students-AcademicStudies/UndergraduateExaminationsPolicy.pdf

Memos

You'll need to submit a one-page (MAX 500 words) reflection memo before midnight on Sunday as outlined in the below schedule. You can do a lot of different things with this memo: discuss something you learned from that week's class, assigned readings, connect the readings or projects from that week to your own assignment or work, etc. These memos essentially let you explore and answer some of the key questions of this course, including:

- Ethical and societal concerns surrounding the implementation and use of business information systems
- Discuss data and data storage issues faced by organizations, including databases, data warehouses, big data, and data analytics
- Why do we visualize data? What makes a great visualization? What makes a bad visualization?
- Etc

These memos will help me see what you learn from each week and some of your key take aways so I can prepare class discussions to be most useful and interesting to you. These memos will only be graded for completion. Submit/Upload your memo to eLearn in the assignment page. Below are the weekly readings

and links if you like to link it to your memos, but are not required. Make the memo write-up unique for

your learning!

Optional Readings:

- **Industry experts on the biggest data storage challenges**
<https://www.intelligentdatacentres.com/2019/05/16/industry-experts-on-the-biggest-data-storage-challenges/>
- **Ethical & Security Issues in Information System** <https://www.guru99.com/mis-ethical-social-issue.html>
- **IBM launches new AI training tool to drive workforce transformation -**
<https://channels.theinnovationenterprise.com/articles/ibm-launches-new-ai-training-tool-to-drive-workforce-transformation>
- **Visualization Best Practices for Business Analysts -**
<https://insidebigdata.com/2018/09/22/visualization-best-practices-business-analysts/>

ONLINE QUIZ

An online quiz will cover materials that are covered in class and from the textbook. The purpose of this 20 question M/C quiz is to encourage students to read the weekly materials and attend class. There will be one, online quiz that comprises the 10% overall weighting in the course. The Quiz will be made available on Connect and must be completed within the time-frame posted in the below schedule. Specific scheduling information will be indicated in Avenue.

Participation

Periodically throughout the semester, there will be a mix of in-class discussions and case/article reviews. The discussions will of course, be based on materials before they are covered in class, and will encourage reflection and critical thinking regarding the readings and in-class content.

GROUP PROJECT

See supporting document for details.

PEER EVALUATION OF GROUP WORK

Write the names of all of the members of your group below, starting with your own.

Then allocate a total of 100 points across all of the names that appear, in proportion to the contribution of each group member to the group effort. You may use the following points as guideline to help you form your evaluation:

Consider whether the group member has:

1. demonstrated responsibility by attending and participating in all team meetings and keeping contact with members throughout the project;
2. demonstrated effective interpersonal skills by showing sensitivity to others' needs and feelings and helping others to become involved;
3. demonstrated effective leadership by assuming the initiative, setting goals and guidelines, leading discussions, working out problems, handling conflicts positively, and generally facilitating the task;
4. contributed significantly, in special ways, to completing the project by, for example, making a table, drawing a chart, or referencing outside material;
5. produced well-prepared individual assignments to all team members and completed an equitable share of work.

Group Member's Name

Points

100 Points

=====

ACTIVITY	DELIVERY	DESCRIPTION	TOOL(S)
Readings	Asynch	Tied to weekly discussion prompts	Readings linked in Avenue, from coursepack, or in assigned textbook
Live Lectures	Both	live session; opportunity to elaborate on content, present & Recorded lecture vids	Zoom or WebEx

Please feel free to ask your instructors or TAs for further guidance if any of the requirements are not clear. Because the project involves multiple domains of business – that correspond to the various 2nd year IBH courses you are taking – please be mindful to direct your questions to the instructor and/or TA that are most closely aligned with the subject matter of your question(s).

Grade Conversion

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme:

LETTER GRADE	PERCENT	POINTS
A+	90-100	12
A	85-89	11
A-	80-84	10
B+	75-79	9
B	70-74	8
B-	60-69	7
F	00-59	0

COMMUNICATION AND FEEDBACK

Students that are uncomfortable in directly approaching an instructor regarding a course concern may send a confidential and anonymous email to the respective Area Chair or Associate Dean:

<http://mbastudent.degrootemcmaster.ca/contact/anonymous/>

Students who wish to correspond with instructors or TAs directly via email must send messages that originate from their official McMaster University email account. This protects the confidentiality and sensitivity of

information as well as confirms the identity of the student. Emails regarding course issues should NOT be sent to the Administrative Assistant.

Instructors are encouraged to conduct an informal course review with students by Week #4 to allow time for modifications in curriculum delivery. Instructors should provide evaluation feedback for at least 10% of the final grade to students prior to Week #8 in the term.

ACADEMIC DISHONESTY

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at:

www.mcmaster.ca/academicintegrity

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations

AUTHENTICITY/PLAGIARISM DETECTION

Some courses may use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. A2L, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software.

All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to www.mcmaster.ca/academicintegrity.

CONDUCT EXPECTATIONS

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

MISSED ACADEMIC WORK

Missed Mid-Term Examinations / Tests / Class Participation

Where students miss a regularly scheduled mid-term or class participation for legitimate reasons as determined by the Student Experience office, the weight for that test/participation will be distributed across other evaluative components of the course at the discretion of the instructor. Documentation explaining such an absence must be provided to the Student Experience – Academic office within five (5) working days upon returning to school.

To document absences for health related reasons, please provide to Student Experience – Academic office the Petition for Relief for Missed Term Work and the McMaster University Student Health Certificate which can

be found on the DeGroote website at <http://mbastudent.degroote.mcmaster.ca/forms-and-applications/>. Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. University policy states that a student may submit a maximum of three (3) medical certificates per year after which the student must meet with the Director of the program.

To document absences for reasons other than health related, please provide Student Experience – Academic office the Petition for Relief for Missed Term Work and documentation supporting the reason for the absence.

Students unable to write a mid-term at the posted exam time due to the following reasons: religious; work-related (for part-time students only); representing university at an academic or varsity athletic event; conflicts between two overlapping scheduled mid-term exams; or other extenuating circumstances, have the option of applying for special exam arrangements. Such requests must be made to the Student Experience – Academic (MBA) office at least ten (10) working days before the scheduled exam along with acceptable documentation. Instructors cannot themselves allow students to unofficially write make-up exams/tests. Adjudication of the request must be handled by Student Experience – Academic (MBA).

If a mid-term exam is missed without a valid reason, students will receive a grade of zero (0) for that component.

Missed Final Examinations

A student who misses a final examination without good reason will receive a mark of 0 on the examination.

All applications for deferred and special examination arrangements must be made to the Student Experience – Academic (MBA) office. Failure to meet the stated deadlines may result in the denial of these arrangements. Deferred examination privileges, if granted, must be satisfied during the examination period at the end of the following term. There will be one common sitting for all deferred exams.

Failure to write an approved deferred examination at the pre-scheduled time will result in a failure for that examination, except in the case of exceptional circumstances where documentation has been provided and approved. Upon approval, no credit will be given for the course, and the notation N.C. (no credit) will be placed on the student's transcript. Students receiving no credit for a required course must repeat the course. Optional or elective courses for which no credit is given may be repeated or replaced with another course of equal credit value.

Requests for a second deferral or rescheduling of a deferred examination will not be considered.

Any student who is unable to write a final examination because of illness is required to submit the Application for Deferred MBA Final Examination and a statement from a doctor certifying illness on the date of the examination. The Application for Deferred MBA Final Examination and the McMaster University Student Health Certificate can be found on the DeGroote website at <http://mbastudent.degroote.mcmaster.ca/forms->

and-applications/ Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. Students who write examinations while ill will not be given special consideration after the fact.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within five business days of the missed examination.

Special examination arrangements may be made for students unable to write at the posted exam time due to compelling reasons (for example religious, or for part-time students only, work-related reasons):

- Students who have religious obligations which make it impossible to write examinations at the times posted are required to produce a letter from their religious leader stating that they are unable to be present owing to a religious obligation.
- Part-time students who have business commitments which make it impossible to write examinations at the times posted are required to produce a letter on company letterhead from the student's immediate supervisor stating that they are unable to be present owing to a specific job commitment.

In such cases, applications must be made in writing to the Student Experience – Academic (MBA) office at least ten business days before the scheduled examination date and acceptable documentation must be supplied.

If a student is representing the University at an academic or athletic event and is available at an overlapping scheduled time of the test/examination, the student may write the test/examination at an approved location with an approved invigilator, as determined by the Student Experience – Academic (MBA) office.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within ten business days of the end of the examination period.

Note: A fee of \$50 will be charged for a deferred exam written on campus and a fee of \$100 for deferred exams written elsewhere. In cases where the student's standing is in doubt, the Graduate Admissions and Study Committee may require that the student with one or more deferred examination privileges refrain from re-registering until the examination(s) have been cleared.

ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

Student Accessibility Services (SAS) offers various support services for students with disabilities. Students are required to inform SAS of accommodation needs for course work at the outset of term. Students must forward a copy of such SAS accommodation to the instructor normally, within the first three (3) weeks of classes by setting up an appointment with the instructor. If a student with a disability chooses NOT to take

advantage of an SAS accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. The SAS website is:

<http://sas.mcmaster.ca>

RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the [RISO](#) policy. Students should submit their request to their Faculty Office ***normally within 10 working days*** of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

COPYRIGHT AND RECORDING

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by University instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

POTENTIAL MODIFICATION TO THE COURSE

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

COURSE SCHEDULE

Important Project Dates

Teams must be formed by January 31st, Team coordinator to email professors with team names.

Group Project Update (Recorded & Not Graded): Due March 4th

Group Project Presentation Order TBA, Week 11 & 12

Written Group Project Due April 12th,

Schedule

Date	TOPIC	Details	Additional information
Week 1	Chapter 1 Management Information Systems: Business DrivenMIS	Chapter 1	
Week 2	Chapter 2 Decisions and Processes: Value Driven Business	Chapters 2	
Week 3	Chapter 4 Ethics and Information Security: MIS Business Concerns TA – Case Discussion (Jan 25 th)	Chapters 4	Memo #1 due
Week 4	Data Mining, BI Introduction, & Regression	Professor Sides	
Week 5	Chapter 6 Data: Business Intelligence	Chapters 6	Memo #2 Due
Recess/Break (February 21 to Sunday, February 27)			
Week 6	MID TERM TEST Chapters 1,2,4 (On Feb 28th - during Class Time 7pm-10pm – one attempt only)		

Week 7	Data Analysis Intro & Data Visualization	Professor Sides	
Week 8	Data Visualization Continued	Professor Sides	Memo #3 Due
Week 9	Data Analysis & Data Visualization	N/A	
Week 10	Chapter 3 Ebusiness: Electronic Business Value TA – Article Review - How to Start an Ecommerce Business (A Complete Blueprint)	Chapters 3	Quiz (Ch3) – Due March 30 th (Opens 03/28/2022)
Week 11	Team Capstone Project Presentations		Memo #4 Due
Week 12	Team Capstone Project Presentations		Final reports due