eHealth 736
Management Issues in eHealth
Fall 2022 Course Outline

MSc eHealth
McMaster University

COURSE OBJECTIVE

This course provides an overview of the key management issues in eHealth. Using an integrated learning via participation approach, the course enables students to achieve a deeper understanding of the issues involved in Health Management Information Systems (HMIS). The course covers topics in an integrated manner, promoting an understanding of health systems governance and a broad range of management duties and responsibilities for healthcare organizations. Through a series of case analyses and presentations, students will be exposed to the various opportunities and challenges involved in managing HMIS in different contexts.

INSTRUCTOR AND CONTACT INFORMATION

Dr. Nicole Wagner	**Manprit Saini**
Instructor	Teaching Assistant
nwagner@mcmaster.ca	kaurm24@mcmaster.ca
Office: RJC 223, DSB A214	Office Hours: TBA

Class time & location: Wednesday   2:30 p.m. – 5:30 p.m.   BSB 138 (in-person)

Course website: http://www.avenue.mcmaster.ca

The course website will be the primary mode of information dissemination. Please check this website regularly for posts concerning the course.

COURSE ELEMENTS

Credit Value:	3	Leadership:	Yes	IT skills:	Yes	Global view:	Yes
Avenue:	Yes	Ethics:	Yes	Numeracy:	No	Written skills:	Yes
Participation:	Yes	Innovation:	Yes	Group work:	Yes	Oral skills:	Yes
Evidence-based:	Yes	Experiential:	Yes	Final Exam:	No	Guest speaker(s):	No

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COURSE DESCRIPTION

This course will expose students to a wide range of topics that are relevant to the management of electronic health informatics and information systems and technologies. The major objective of the course is the understanding of the different functions of management in regards to information technology in healthcare. The delivery of the course encompasses a range of methods including lectures, case studies, and group discussions. Students will learn experientially through the analysis of a variety of case studies exploring eHealth management issues.

LEARNING OUTCOMES

Upon completion of this course, students will be able to complete the following key tasks:

➢ Understand the different concepts and terminologies of information systems and technology in healthcare

➢ Become familiar with opportunities and issues in the area of health management information systems

➢ Gain an understanding of the various roles and requirements of management as well as the roles and needs of the various stakeholders

➢ Gain an understanding of the legal and cultural issues associated with eHealth

➢ Become familiar with some of the policy-related issues as well as the socio-technical issues

➢ Understand how to organize/control the process of planning and implementing of various eHealth systems

➢ Assume the role of the decision maker in various managerial situations related to HMIS

➢ Develop effective profession presentation and report writing skills

REQUIRED COURSE MATERIALS AND READINGS

Business Driven Information Systems, 8th edition, Baltzan, McGraw-Hill Education.

eText with Connect (all digital)	$94.95
OR	OR
Textbook with Connect (physical book)	$119.95

Lecture Notes, Assignments, and other Course Content $ FREE
> Available via course website (Avenue)

Cases Course Pack, Fall 2022   ~$30.00
> Purchase instructions will be provided in class

EVALUATION

Learning in this course results primarily from lectures, in-class discussion, and participation in comprehensive case analysis. All work will be evaluated on an individual basis except in certain cases where group work is expected. In these cases, group members will share the same grade adjusted by peer evaluation. The instructor reserves the right to modify the weightings to adjust for more or less material covered during the term or to modify the course components. Your final grade will be calculated as follows:

Components and Weights

Team Development	Team contract (group)	3%
	Peer feedback report 1 (individual)	1%
	Peer feedback report 2 (individual)	1%
Case Studies	In-class case presentation (group)	20%
	Written case report (group)	20%
	Case study component reflection (ind)	5%
Assignments (Individual)	Frameworks assignment	10%
	Excel assignment	15%
Engagement (Individual)	Synchronous (in-class)	15%
	Asynchronous (reading assignments)	10%
Total		**100%**

NOTE: All assignments must be handed in electronically through the course website by the deadline date and time specified for each assignment in the course outline. The penalty for overdue assignments is 20% per day. **Overdue case reports will receive a mark of zero.**

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+	77-79	9
B	73-76	8
B-	70-72	7
F	00-69	0

Course Deliverables

Team Development (Group & Individual)

A significant component of the evaluation of this class will be based on team work. You will be grouped into teams of about 5 students. In order to achieve the full benefits expected from working in a team and to be fair to fellow team members, all members are expected to contribute equally to team work and to be fully informed of all aspects of their team assignments. One potential negative aspect of working in teams is that conflict may arise among team members. Such conflict could negatively impact the progress of the team towards achieving its objectives. Hence, every effort should be made, by all team members to be reasonable and to avoid conflicts.

Team Development components (worth 5% of your grade) are intended to provide groups with tools to help encourage the development of a positive and constructive group-work environment. Teams will develop a contract as a group to set expectations for the term (3%). Each individual will then submit a peer feedback report within three days after each group deliverable to assess the contribution of each team member to that component (1% each). At the discretion of the instructor, peer feedback may impact student grades as follows: if 60% or more of the members report that a team member has not contributed equally on a grade component, the assignment grade of the offending student may be reduced by up to 20% on that component. Further details will be provided in class.

Case Presentation (Group)

The case presentation is worth 20% of the final grade. The case presentation will be done in a group format and graded as a group, adjusted for peer evaluation. All members are expected contribute equally to the case study analysis and to participate equally in the presentation. The case presentations will be scheduled throughout the course (refer to the course schedule for the list of selected cases each week). All cases are available to students through the CoursePack (download from iveypublishing.ca). The process for case selection will be described in class.

Presentations should take no more than 30 minutes with an additional 15 minutes for questions and answers. Students are expected to make effective use of the course material discussed in class as well as other appropriate resources available. The team presentation will be graded on how professional and comprehensive the presentation is. PowerPoint presentations are expected. The evaluation form used will be available on the class website.

Case presentation **slides must be handed in electronically through the course website two hours before the beginning of class** on the day the case is being presented. Late slides will receive a penalty of 10%.

Case Report (Group)

The case report is worth 20% of the final grade and is to be completed as a group. The cases are distributed throughout the course schedule to support the learning objectives of the various topics. Refer to the course schedule for a list of cases. The process for case selection will be described in class. *The case report will be written for a different case than presented with your group*.

Reports are not to exceed 15 pages in length (1.5 spaced) inclusive of any exhibits and/or appendices. The 15 page maximum does not include the title page, table of contents, executive summary, or references. In completing case reports, students are expected to make effective use of material in the case as well as other resources available from the Web or specialized relevant journals. All references must be included and properly cited (APA style). Your mark will be based on how professional and comprehensive your case analysis report is. Reports are expected to be written in a professional style, free of spelling and grammatical mistakes. The evaluation form for case reports will be available on the course website.

The case report must be handed in electronically through the course website before the class presentation of the same case. **Failure to upload the case analysis to the course website before class will result in a zero grade for this portion of the course**.

Case Study Component Reflection (Individual)

This component is worth 5% of the final grade and is to be completed individually. Towards the end of the term, students will be asked to reflect on their experience with the preceding case study components (presentation and report) to examine the learnings provided by each. Further details will be provided in class.

Frameworks Assignment (Individual)

This component is worth 10% of the final grade and is to be completed individually. In class we will explore several frameworks for the analysis of organizations and systems adoption. This assignment will provide students the opportunity to practice using the frameworks and receive feedback in advance of using them for case analysis components. Further details will be provided in class.

Excel Assignment (Individual)

This component is worth 15% of the final grade and is to be completed individually. In class we will have an Excel tutorial to introduce beginner-intermediate Excel techniques. This assignment will provide the opportunity to apply these skills in a decision-making context. The course TA will be available to answer assignment-related questions during office hours. Further details will be provided in class.

Engagement (Individual)

Engagement with this online course is worth 25% of your final grade, divided between synchronous engagement (15%) and asynchronous engagement (10%).

Synchronous elements of the course will take place during the scheduled course time and students are required to attend in-person. Opportunities for synchronous engagement include:

- Taking part in discussions during classes by asking questions, responding to questions, and reporting back to the class after break-out discussions.
- Taking part in case discussions and asking questions of the presenting group. To do this properly, you must read and reflect on the case being presented on any given week prior to coming to class.

To help give credit for synchronous engagement, students should identify themselves using a name card displaying their full first and last name. If you are absent from any synchronous component for a legitimate reason, you should indicate that to the instructor through e-mail so that you are not penalized for lack of engagement during that class. Engagement marks will be based on both the quantity and quality of your synchronous contributions. Mere attendance without participation does not earn you any engagement marks.

Asynchronous elements of the course are to be completed individually at the student's own pace. Weekly readings, discussions, and/or activities will be assigned through the course website. Students can then plan for the completion of these tasks at their discretion prior to the deadlines.

Students can expect to spend approximately 3 hours per week (total) engaged in the synchronous and asynchronous delivery elements of the course.

ACTIVITY	DELIVERY	DESCRIPTION	TOOL(S)
Readings & Videos	Asynch	Asynchronous engagement with course materials, preparation for sync sessions	Provided in Avenue or link to McGraw-Hill Connect
Group Discussions	Both	Synch: During lecture Asynch: Microsoft Teams private groups	Synch: Classroom Asynch: Microsoft Teams
Live Lectures	Synch	One session per week during class time; topic and duration listed on course schedule	In-person: BSB 138

COMMUNICATION AND FEEDBACK

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 INTEGRITY

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

In this course we will be using 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.

COURSES WITH AN ON-LINE ELEMENT

Some courses may use on-line elements (e.g. e-mail, Avenue to Learn (A2L), LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course.

The available information is dependent on the technology used. Continuation in a course that uses on-line elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

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 Examinations / Tests / Class Participation

Students can apply for relief of missed term work if they have or are going to miss an evaluated portion of their course. Please contact the Program Administrator for more information.

Students can request relief for:
- Health-related or extenuating circumstances
- Work-related commitments (for part-time students only)
- Representing the University at an academic or varsity event
- Religious obligations
- Conflicts between two (or more) overlapping scheduled mid-term exams

Requesting Relief for Missed Term Work

If a portion of your term work is missed for legitimate reasons, as determined by Program Administrator, the weight for that missed term work will be redistributed across the other assignments and exams of the course. For missed work, forms and supporting documentation must be submitted to Program Administrator within five (5) business days of missing the work or mid-term exam.

Requesting Relief for Term Work in Advance

If evaluated term work is missed, students can request for relief/special arrangement in advance. Supporting documentation must be submitted to the Program Administrator at least ten (10) working days before the mid-term exam, test, assignment, etc.

The program administrator will provide the required forms to the student. Please complete the Petition for Missed Term Work form in addition to:

- For medical reasons the McMaster University Student Health Certificate and for extenuating circumstances, appropriate documentation is required.
- Due to a business commitment (for part-time students only), have your immediate supervisor provide you with a letter on company letterhead stating that you are unable to be present due to a specific job commitment.
- For varsity reasons, have a designated University official provide a letter on university letterhead; or
- For religious reasons, have your religious leader provide a letter stating that you are unable to be present due to a religious obligation.

In all cases, the request must be handled by The Program Administrator. The appropriate distribution of re-weighting term work will be determined by the instructor. Submitting a request does not guarantee approval or special consideration.

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.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) to the various learning activities of eHealth 736 will be considered to be an implicit acknowledgement of the course policies outlined above, or of any other that may be announced during lecture and/or on A2L. **It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.**

Lack of awareness of the course policies **cannot be invoked** at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand.

eHealth 736 Tentative Course Schedule

Wk	Due Before Class	Synchronous Class	Due by Friday @ 11:59pm
1 Sep 14 (3)		Welcome & Overview Team Development Learning with Cases	
2 Sep 21 (2)	RA Ch1: Business Driven MIS RA Ch2: Decisions & Processes	Ch 1 & 2 Discussion Project Management	Team Contract
3 Sep 27 (3)	(optional: management readings)	Mgmt & Org Concepts Change Management	
4 Oct 5 (2.5)	RA Ch3: Electronic Bus Value	Business Models Strategy & Analysis Frameworks Frameworks Assignment Distrib.	
5 Oct 12 (2.5)	RA Ch6: Business Intelligence	Data Management Business Intelligence	Frameworks Assignment
6 Oct 19 (3)	Prepare sample case: Calgary Drop-in Centre	Sample Case Discussion	
7 Oct 26 (3)	Read case: Williams Coffee Pub	Excel Tutorial Excel Assignment Distribution	
8 Nov 2 (2.5)	RA Ch5: Infrastructure RA AppA: HW & SW Basics (0.5)	Case 1: Physio2U Infrastructure	
9 Nov 9 (3)	RA Ch8: Enterprise Systems	Case 2: Evolko Enterprise Systems	
10 Nov 16 (3)		Case 3: Carefirst Usability	Excel Assignment
11 Nov 23 (3)	RA Ch9: Systems Development	Case 4: SJHH Acquiring Systems	
12 Nov 30 (3)	RA Ch7: Networks	Case 5: Savemom Mobile	
13 Dec 7 (2.5)	RA Ch4: Ethics & Security RA AppD: Emerging Trends (0.5)	Risk & Security Emerging Trends	Case Reflection

<u>Note</u>: Details for each week (including submission requirements) will be provided via the course website