



BUSINESS C711
Health Economics and Evaluation
Fall 2026 Course Outline

Health Policy and Management
DeGroote School of Business
McMaster University

COURSE OBJECTIVE

DeGroote's MBA specialization in Health Services Management (HSM) is the only one of its kind in Canada. Industry leaders and alumni agree that one of the most valuable courses offered has been the health economics/evaluation course that has appeared in the calendar under various names over the last 30+ years. The objective of this course is to enable the students with the working knowledge of economic principles to apply them in situations that encompass access and policy related to healthcare

INSTRUCTOR AND CONTACT INFORMATION

Jacob Smith

Instructor

smitj99@mcmaster.ca

Office Hours: Online by Appointment

COURSE ELEMENTS

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

COURSE DESCRIPTION

This course will examine the application of economic principles to policy-relevant questions in the areas of health and healthcare. Topics may include but not be limited to applied health economics, economic evaluation of health technologies and programs (pharmaceuticals, devices, etc), cost-effectiveness, cost-utility and cost-benefit analyses, and means by which to improve value-for-money in the health sector.

This course will be taught using lectures, guest speakers, discussions, research projects and presentations and will be primarily an in-person course. Lectures will not attempt to cover all the possible materials but will provide a starting place for class discussion. Some of the class time will be used to engage in activities designed to illustrate certain topics and issues and to provide a basis for their discussion

LEARNING OUTCOMES

The objective of this course is to enable the students with the working knowledge of economic principles to apply them in situations that encompass access and policy related to healthcare. Some specific examples of such roles are:

- Market access associate/manager in a pharma company
- Market access associate/manager in a consulting company
- Reimbursement associate/manager in a public/private payer organization
- Health policy analyst within F/P/T government

REQUIRED COURSE MATERIALS AND READINGS

Avenue registration for course content, readings and case materials including eReserves for select book chapters

<http://avenue.mcmaster.ca>

Cost Effectiveness Modelling for Health Technology Assessment: A Practical Course by Ricard Eldin, Christopher McCabe, Claire Hulme, Peter Hall and Judy Wright. (105.92 CAD. Amazon)

OPTIONAL COURSE MATERIALS AND READINGS

Methods for the Economic Evaluation of Health Care Programmes 3rd or 4th Edition. By Drummond Et al. (110.00 CAD Amazon)

Budget Impact Analysis of Health Care Interventions: A Practical Guide Mauskopf et al. (140.78 CAD)

EVALUATION

Components and Weights

Problem Sets 4x	50%
Critical Review of a Cost Effectiveness Analysis	30%
Presentation of Critical Review of Cost Effectiveness Analysis	20%
Total	100%

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

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

Problem Sets (4x 12.5% each)

This course is about economic evaluation in healthcare, specifically we will be focusing conceptually on how key results in economic evaluation are computed. Exercises may range from pen and paper analyses to a request for computing specific output in Excel. The main objective is that you get exposure to using the tools we have discussed in class. While you may discuss the problem sets with each other, these assignments are individual.

Critical Review of a Cost Effectiveness Analysis (30%)

In groups, you will be assigned a cost effectiveness article to critically review. In your critical review it is expected that you summarize the key findings of the article and speak to its limitations. Criticisms must be grounded in the article and relevant literature. Criticisms may be about (but not limited to) the model employed, characterization of costs and benefits, perspective of the analysis.

Presentation of Critical Review of Cost Effectiveness Analysis (20%)

Your group will present a PowerPoint presentation on your critical review. All group members are expected to be actively involved in the presentation and address any questions. Time limit for the presentations will depend on class size and the number of group

COURSE SCHEDULE

WEEK	DATE	TOPIC	READINGS
1	September 8	Economic Evaluation, Cost Effectiveness Analysis and Health Care Resource Allocation	Cost Effectiveness Modelling for Health Technology Assessment Ch 1.
2	September 15	Searching the Literature; Measuring Costs; Measuring Effects.	Cost Effectiveness Modelling for Health Technology Assessment Ch 2.
3	September 22	Decision Tree Models Problem Set #1 DUE @ 11:59 PM	Cost Effectiveness Modelling for Health Technology Assessment Ch 3.
4	September 29	Markov Models	Cost Effectiveness Modelling for Health Technology Assessment Ch 5.
5	October 6	Model Perspective and Discounting	Selected Readings
6	October 13	Deterministic Sensitivity Analysis; One way and Two-way Sensitivity Analysis Problem Set #2 DUE @ 11:59 PM	Cost Effectiveness Modelling for Health Technology Assessment Ch 4.
7	October 20	Probabilistic Sensitivity Analysis	Cost Effectiveness Modelling for Health Technology Assessment Ch 4, Ch 5, Ch 6.
8	October 27	Value of Information Analysis Problem Set #3 DUE @ 11:59 PM	Cost Effectiveness Modelling for Health Technology Assessment Ch 12
9	November 3	Budget Impact Analysis	Selected Readings
10	November 10	Funding Prioritization and League Tables	Selected Readings
11	November 17	Multiple Criteria Decision Analysis Problem Set #4 DUE @ 11:59 PM	Selected Readings
12	November 24	Group Presentations 1	None
13	December 1	Group Presentations 2 Critical Review Due @11:59PM	None



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.degroote.mcmaster.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 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

Students are responsible for being aware of and demonstrating behaviour that is honest and ethical in their academic work. Such behaviour includes:

- following the expectations articulated by instructors for referencing sources of information and for group work;
- asking for clarification of expectations as necessary;
- identifying testing situations that may allow copying;
- preventing their work from being used by others (e.g., protecting access to computer files); and

- adhering to the principles of academic integrity when conducting and reporting research.

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, Teams, 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.

ATTENDANCE

Arriving late or missing class disrupts the learning experience for both you and your peers. Punctuality and attendance are crucial to maintaining a respectful, professional and productive environment for everyone, including our faculty.

Instructors may use Top Hat in their course in a variety of ways, including to capture attendance in their classes. Attendance is recorded by submitting a unique 4-digit code displayed in your physical classroom using your personal device.

MISSED ACADEMIC WORK

Missed Mid-Term Examinations / Tests / Class Participation

Please do not use the online [McMaster Student Absence Form \(MSAF\)](#) as this is for Undergraduate students only. The MBA program will not accept an MSAF.

When students miss regularly scheduled term work which contributes 10% or more to the final grade, for legitimate reasons as determined by the [DSB Student Services – Academic Office](#) (DSSAO (DSB Student Services Academic Office)), the activity necessary to compensate for the missed work will be determined by the course instructor. The compensatory activities assigned will vary with the nature of the course and the missed requirement. They include, but are not restricted to, an alternative assignment, a rescheduled midterm exam, or re-weighting the marks for the missed component to other mark components. Documentation explaining such missed work must be provided to the DSSAO (DSB Student Services Academic Office) **within five (5) working days** of the scheduled date for completion of the work.

Acceptable reasons for missed work, along with the [Petition for Missed Term Work](#) and the [MBA Student McMaster University Student Health Certificate](#), can be found on the DeGroote MBA Student website (mbastudent.degroote.mcmaster.ca). Please direct any questions about acceptable documentation to the MBA Academic Advisors (askmba@mcmaster.ca).

University policy states that a student may submit a **maximum of three (3)** [Petition for Missed Term Work](#) per academic year, after which the student must meet with the Director of the program.

If term work is missed without an approved reason, students will receive a grade of zero (0) for that component.

Missed Final Examinations

Students must be available for the duration of the posted exam period regardless of their personal exam schedule. This is to ensure student availability throughout the entire exam period in the event that an exam must be rescheduled due to unforeseen circumstances (university closure, power outage, storm policy, etc.). A student who misses a final examination without valid reason will receive a mark of 0 on the examination.

Students who have missed a final exam for a valid reason can apply to the DSSAO ([DSB Student Services Academic Office](#)) to write a deferred examination by submitting an [Application for Deferring a Final Exam](#) with supporting documentation. The application must be made **within five days** of the scheduled exam.

The [Application for Deferring a Final Exam](#) and the [MBA Student McMaster University Student Health Certificate](#) can be found on the DeGroote MBA Current Student website (mbastudent.degroote.mcmaster.ca)

Deferred examination privileges, if granted, are normally satisfied during the deferred examination period as set by the [Office of the Registrar](#).

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

ARTIFICIAL INTELLIGENCE

Students are not permitted to use generative AI in this course. In alignment with [McMaster academic integrity policy](#), it “shall be an offence knowingly to ... submit academic work for assessment that was purchased or acquired from another source”. This includes work created by generative AI tools. Also state in the policy is the following, “Contract Cheating is the act of “outsourcing of student work to third parties” (Lancaster & Clarke, 2016, p. 639) with or without payment.” Using Generative AI tools is a form of contract cheating. Charges of academic dishonesty will be brought forward to the Office of Academic Integrity.

ACADEMIC ACCOMMODATION FOR STUDENTS WITH DISABILITIES

Student Accessibility Services (SAS) offers various support services for students with disabilities. Students must activate their accommodation(s) (e.g., extra-time, alone room, etc.) via [mySAS](#) portal at the beginning of each term, normally, within the first three (3) weeks of classes. 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>



Use of Test Accommodations at McMaster University Burlington Campus Ron Joyce Centre

Whereas Student Accessibility Services (SAS), on Main Campus, determines all MBA student accommodations, the MBA Faculty Office manages the coordination of accommodations for tests, midterms, and exams at the Ron Joyce Centre in Burlington.

Process for Students

- Student Accessibility Services (SAS) now uses the online [mySAS](#) Portal for graduate students to share accommodation letters with their instructors and Faculty/Program. Students are responsible for activating their accommodations each term through the [mySAS](#) Portal. Once activated, an approved accommodation letter will be automatically sent to the instructors associated with the student's enrolled courses for that term.
- Students must engage the DSSAO (DSB Student Services Academic Office) to implement their accommodation(s) (e.g., extra-time, alone room, etc.) for each upcoming test, midterm, or exam, at **least two weeks in advance**. Students can do this by emailing DeGroote MBA SAS scheduling office at DSBSAS@mcmaster.ca or completing the [Accommodation Implementation form](#). If a student cannot meet this deadline, they should contact DSBSAS@mcmaster.ca to discuss alternative arrangements. The program is committed to exploring flexibilities where possible to support students.
- All tests, midterms, and exams are booked synchronously with the class's start time. Any deviations from the start time (e.g. start earlier than the class to enable completion at the same end time) requires a discussion with their instructor on protocol at the time of accommodation activation.
- Students will leverage the accommodation (e.g., extra-time, alone room, etc.), in a designated testing room. Rooms will be booked according to the student's SAS accommodation. Unless the accommodation states otherwise, students should expect that they will be writing in a room with other students. One or more invigilators will always be in the room.
- Following the request to implement the accommodation(s), dsbsas@mcmaster.ca will reach out to the student with their test, midterm, or exam details, including the date, time, and room number. As there may be other students writing tests in the room, we ask that students enter the room quietly and leave all personal items at the front of the room.

All policies and procedures, including restroom access, how extra-time is allocated for assessments under Universal Design, and the submission of memory aids in advance, are consistent with those of SAS on Main Campus. The only variance in procedure is communication around, and physical

location of, assessment. There is not a dedicated testing space at RJC. Existing classrooms and lecture halls will be used for most testing. All SAS-approved accommodations will be honoured by our staff; however, core testing elements are not eliminated in alternative testing formats. Students should expect and plan for invigilation, incidental noise, and other potential distractions.

ACADEMIC ACCOMMODATION FOR 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 the DSSAO (DSB Student Services Academic Office) ***normally within 10 working days*** of the beginning of term in which they anticipate a need for accommodation. 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.

