

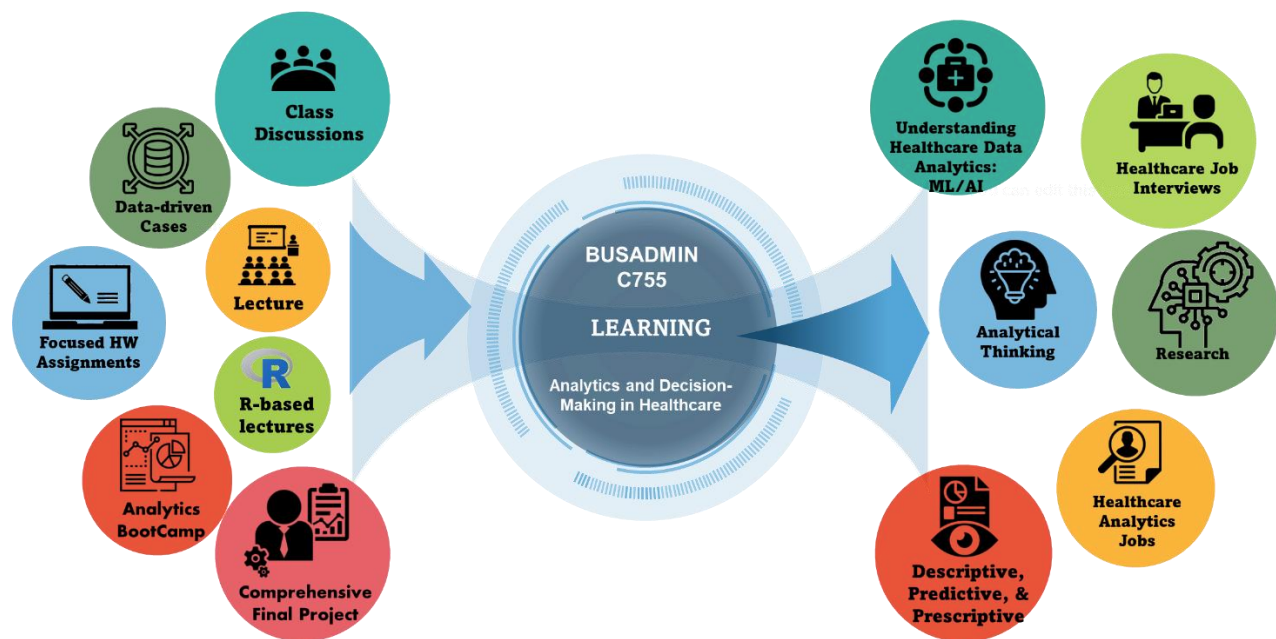
**COURSE OUTLINE****BUSADMIN C755: Analytics and Decision-Making in Healthcare****Winter 2026**

Health Policy & Management Area  
DeGroote School of Business  
McMaster University

**COURSE OBJECTIVE**

The course aims to provide a thorough understanding of decision analysis techniques, both model-driven and data-driven, and apply them to healthcare management and other fields. It aims to equip students with robust analytical tools for structured problem-solving and data analysis, enhancing their ability to make informed decisions. Through a blend of virtual and on-site learning, the course fosters active learning and practical application to real-world scenarios, preparing students to tackle complex challenges in healthcare and other industries with confidence and expertise.

The following graph illustrates the different elements of learning and the anticipated outcomes of this course.



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**INSTRUCTOR/TA AND CONTACT INFORMATION**

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Role	<b>Coordinator/Instructor</b>	<b>TA</b>
Name	<i>Somayeh Ghazalbash, PhD</i> <i>Sessional Faculty</i>	
Affiliation	<i>DeGroote School of Business</i> <i>McMaster University</i>	
Email	<a href="mailto:ghazalbs@mcmaster.ca">ghazalbs@mcmaster.ca</a>	
Office	-	
Office Hours	<i>By appointment</i>	
Course Website	<a href="http://avenue.mcmaster.ca">http://avenue.mcmaster.ca</a>	-

**Class Day/Time:**

- **Mondays (11:30 AM - 2:20 PM)**
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**COURSE ELEMENTS**

<b>Avenue:</b>	Yes	<b>Leadership:</b>	No	<b>IT skills:</b>	Yes	<b>Global view:</b>	Yes
<b>Participation:</b>	Yes	<b>Ethics:</b>	Yes	<b>Numeracy:</b>	Yes	<b>Written skills:</b>	Yes
<b>Evidence-based:</b>	Yes	<b>Innovation:</b>	Yes	<b>Group work:</b>	Yes	<b>Oral skills:</b>	Yes
<b>Experiential:</b>	Yes	<b>Guest speaker(s):</b>	Yes	<b>Final exam:</b>	No		

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**COURSE DESCRIPTION**

This course supports healthcare management in the digital transformation era. It is a rigorous exploration of analytical methods and decision-making techniques for healthcare problems by integrating model-driven and data-driven techniques. Model-driven approaches, such as simulation, decision trees, and linear programming, focus on structured problem-solving using predefined models. Data-driven techniques delve into descriptive, predictive, and prescriptive analytics, harnessing data to inform decisions. Delivered through a mix of virtual and on-site classes, including webinars and weekend residencies, it aims to equip students with the tools to make informed decisions in healthcare settings, leveraging both synchronous and asynchronous learning to accommodate the schedules of part-time students. By integrating these methodologies with practical applications and real cases, students will learn to navigate the complexities of healthcare decision-making in the digital era, enhancing their capacity to contribute strategically to the field. This course encourages active learning and direct application of concepts to real-world healthcare management challenges, making it ideal for inquisitive, driven individuals seeking to link theory with their professional experience. While the course primarily uses healthcare examples, the methodologies taught are applicable across other industries and disciplines, offering versatile skills for tackling complex decision-making challenges in various contexts.

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## LEARNING OUTCOMES

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

- Understand digital transformation in healthcare
  - Gain a deep understanding of how Artificial Intelligence (AI) and Machine Learning (ML) are applied to solve healthcare challenges.
  - Employ analytical thinking for describing healthcare problems, predicting their outcomes, and improving their results
  - Apply data-driven techniques in the presence of data and model-driven techniques in the absence of data
  - Explain how analytics can be utilized to improve the quality and efficiency of healthcare deliveries for individuals, populations, and global health
  - Describe data analytics techniques and decision analysis practices in healthcare and how they can be useful
  - Describe healthcare data visualization principles, healthcare prediction approaches, and healthcare optimization techniques for supporting decision-making
  - Design analytical strategies to characterize important issues and solutions for improving individual, population, and global health
  - Discover meaningful, relevant, and important patterns and trends from healthcare data
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## REQUIRED COURSE MATERIALS AND READINGS

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*The course material (chapters, articles, case studies, tutorials, etc.) will be provided online through the BUSADMIN C755 Course site on McMaster's Avenue to Learn system (<http://avenue.mcmaster.ca>) FREE.*

**Textbooks (all FREE to access through McMaster Library)**

*All following textbooks are free for McMaster students to be downloaded through the link I have provided below the textbook title or by searching the textbook title on the McMaster Library portal (<https://library.mcmaster.ca>). At some point, you need to log in using your Mac ID/Password, and you may also need to connect via VPN (if connecting from outside the University):*

**1) *R for Health Data Science* / By Ewen Harrison & Pius Riinu**

<https://www-taylorfrancis-com.libaccess.lib.mcmaster.ca/books/mono/10.1201/9780367855420/health-data-science-ewen-harrison-pius-riinu>

Then, click on “download”.

**2) *Data Science and Predictive Analytics (Biomedical and Health Applications using R)* / By Ivo D. Dinov**

<https://link-springer-com.libaccess.lib.mcmaster.ca/book/10.1007%2F978-3-319-72347-1>

Then, click on “Download Book PDF”.

**3) *Analytics and Decision Support in Health Care Operations Management* / By Yaser Ozkan**

<https://ebookcentral.proquest.com/lib/mcmu/detail.action?pq-origsite=primo&docID=7104484>

Then, click “Download PDF Chapter” for any chapter of interest.

Optional reading regarding some background knowledge about Statistics useful for the course (ch1-5):

**4) *Excel 2019 for Health Services Management Statistics (A Guide to Solving Problems)* / By Quirk & Cummings**

<https://link-springer-com.libaccess.lib.mcmaster.ca/book/10.1007%2F978-3-030-57828-2>

Then, click on “Download Book PDF”. Optional reading for **Global Health Students**:

5) *Leveraging Data Science for Global Health*/ By Leo Anthony Celi et al.

<https://link-springer-com.libaccess.lib.mcmaster.ca/book/10.1007%2F978-3-030-47994-7>

Then, click on “Download Book PDF”.

## CLASS FORMAT AND SCHEDULE

### In-Class (On-Campus)

- The in-class sessions may include any combination of lectures, guest speakers, group discussions, computer labs, or other content.
- Additional content (readings, videos, etc.) may be posted on the A2L site throughout the term.
- Students are expected to complete all required readings and submit the assignments prior to attending class each week.
- Guest speakers are subject to change. **As a courtesy, students are expected to close their laptops and participate by asking thoughtful questions when there are guest speakers.**
- Students may not make audio and/or video recordings of any portion of a class without the written permission of one of the instructors.
- All students are expected to attend and participate during student presentations.

### Online Discussions (through A2L): Analytics BootCamp Weeks

The online classes, referred to as “*Analytics BootCamp weeks*,” occur in particular weeks according to the course schedule (please see the class schedule).

## EVALUATION

Learning in this course comes from readings, lectures, case studies, in-class and online discussion and participation, completion of assignments, and presentations. All work will be evaluated on an individual basis except where group work is expected. In these situations, group members will share the same grade unless group members agree to an adjustment. Peer evaluation might also be used to assess the member’s contributions to their own group. Online lectures (i.e., Analytics BootCamps) will be facilitated through the Avenue to Learn (A2L) platform. Students are expected to be adult learners who will independently read course content posted on the A2L course website, analyze information, and share their new knowledge and understanding with their classmates (in-class and online) so that they learn from each other as well as from the instructor. Students will use course content posted on A2L and the textbook, along with additional readings, videos, or websites as identified throughout the course. For online components of the course, students will complete and post assignments and/or interact with other students through A2L.

### Components and Weights

Component	Type	Weight	Timing / Due Data	Content
<b>PARTICIPATION</b>	individual	15%	All classes	Active involvement in class discussions. <b><i>Attendance is a necessary but not sufficient condition for this component.</i></b>
<b>ASSIGNMENTS</b>	individual	25%	Roughly every week, depending on the contents (5*5%)	homework assignments
<b>BOOTCAMP DISCUSSION</b>	individual	30%	During BootCamp weeks (2*15%)	Administered through A2L
<b>FINAL PROJECT</b>	group & individual	30%	<a href="#">Presentations/group (65%)</a> <a href="#">Report/individual (35%)</a>	<b>Practical project:</b> analysis, presentation, and report.

## Assignments & Participation

Name cards and photographs are used to help give credit for your participation. You must have your **full first and last name** clearly written and displayed in front of you for every in-class and online session.

**Students are expected to post their photographs on the Avenue to Learn system during the first week of class.** The instructor will feel free to cold-call anyone at any time. Hence, it is imperative that you prepare for each and every case and reading. Participation will **NOT** be graded by counting each contribution a student makes. Participation will be graded by examining the **quality** of contributions each week.

When individual or group assignments are required to be submitted, students should do so by midnight (EST) of the due date. All assignments are to be submitted as Word or PDF documents. Please note that should there be any problems with the A2L site that limits students' ability to participate in discussions or submit assignments, all deadline times/dates will be extended. All submissions (presentation slides, summary reports, and evaluations) must be made through A2L designated for the assignment of the interest.

### A2L Discussion Questions

Students are expected to post at least one main response to each A2L discussion question. In addition, you are expected to participate in the overall online discussion by commenting on other students' posts (at least two times per discussion week).

Postings should be concise, reflective, and respectful. Students are expected to share ideas and experiences related to the topics presented during online discussions. Make sure you are adding value and not simply repeating what others have already said. **Please note that the evaluation of your online participation will be based on the quality of your overall contribution.**

At the discretion of the instructor, students may also be assigned one week during which they will be responsible for facilitating discussion (getting things started early in the discussion period and intervening when necessary) and/or for summarizing the main discussion points at the end of the week (keeping the summary brief and posting it prior to the closing of the discussion time window). The course instructor and/or TA will limit their participation so as not to overly influence the direction of the discussion. During the online weeks, you will only have access to your discussion group. There is also a General Discussion area where students may interact with each other. The instructor/TA will not be monitoring this area routinely, so if you have an important question, please email the instructor/TA directly using the McMaster email.

### The end-of-term projects will be evaluated for

1. Completeness and correctness of the analytical techniques/modeling,
2. Innovation in analytical thinking,
3. Managerial/policy insights,
4. Ability to facilitate discussions.

Groups will be assigned a date for their presentation. The presentation slides are to be submitted no later than midnight of the day of the presentation.

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## GRADE CONVERSION

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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	LETTER GRADE	PERCENT
A+	90 – 100	B+	75 – 79
A	85 – 89	B	70 – 74
A-	80 – 84	B-	60 – 69

## ***COMMUNICATION AND FEEDBACK***

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Students who are uncomfortable in directly approaching an instructor regarding a course concern may send a confidential email to the respective Area Chair of the Health Policy & Management Area<sup>1</sup> or the 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 Area Administrative Assistants. 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.

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## ***ACADEMIC INTEGRITY***

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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. a 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](http://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.
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## ***AUTHENTICITY/PLAGIARISM DETECTION***

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***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.

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<sup>1</sup> Link to the Health Policy & Management Area’s portal: <https://research.degroote.mcmaster.ca/faculty-areas/health-policy-and-management/>



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](http://www.mcmaster.ca/academicintegrity).

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### ***COURSES WITH AN ONLINE ELEMENT***

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**All courses** use some online 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, usernames for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course.

Students may be required to use the Respondus LockDown Browser and Respondus Monitor. The Respondus LockDown Browser is a downloadable program that allows a student to take an Avenue to Learn quiz in a secure environment. Quizzes can be set to use LockDown Browser or LockDown Browser.

For more details about McMaster's use of Respondus Lockdown Browser, please go to <https://avenuehelp.mcmaster.ca/exec/respondus-lockdown-browser-and-respondus-monitor/>

The available information is dependent on the technology used. Continuation in a course that uses online 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.

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### ***ONLINE PROCTORING***

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**Some courses may** use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict their browser or other applications/software during tests or exams. This software may be required to be installed before the test/exam begins.

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### ***CONDUCT EXPECTATIONS***

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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.

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## *ATTENDANCE*

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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 courses 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.

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## *MISSED ACADEMIC WORK*

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### ***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 Student Experience – Academic Office (SEAO: Student Experience 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 SEAO (Student Experience 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](http://mbastudent.degroote.mcmaster.ca)). Please direct any questions about acceptable documentation to the MBA Academic Advisors ([askmba@mcmaster.ca](mailto: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 SEAO (Student Experience 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](http://mbastudent.degroote.mcmaster.ca))

Deferred examination privileges, if granted, are normally satisfied during the examination period at the end of the following semester. In select cases, the deferred examination may be written at a time facilitated by



the SEAO (Student Experience Academic Office) (Student Experience Academic Office) and agreed to by the course instructor.

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

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### ***ACADEMIC ACCOMMODATION FOR STUDENTS WITH DISABILITIES***

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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 the 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>

#### ***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**

- Students must activate their accommodation(s) (e.g., extra-time, memory aid, etc.) for each upcoming test, midterm, or exam, at least two weeks in advance. Students can do this by emailing their Instructor and the DeGroote MBA SAS scheduling office at [DSBSAS@mcmaster.ca](mailto:DSBSAS@mcmaster.ca). If a student cannot meet this deadline, they should contact [DSBSAS@mcmaster.ca](mailto: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, memory aid, 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 activate the accommodation(s), [dsbsas@mcmaster.ca](mailto: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.

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### ***ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)***

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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 SEAO (Student Experience 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.

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### ***COPYRIGHT AND RECORDING***

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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.

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### ***POTENTIAL MODIFICATION TO THE COURSE***

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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.

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### ***RESEARCH USING HUMAN SUBJECTS***

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#### ***ONLY IF APPLICABLE***

Research involving human participants is premised on a fundamental moral commitment to advancing human welfare, knowledge, and understanding. As a research intensive institution, McMaster University shares this commitment in its promotion of responsible research. The fundamental imperative of research involving human participation is respect for human dignity and well-being. To this end, the University endorses the ethical principles cited in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans: <http://www.pre.ethics.gc.ca>

McMaster University has mandated its Research Ethics Boards to ensure that all research investigations involving human participants are in compliance with the Tri-Council Policy Statement. The University is committed, through its Research Ethics Boards, to assisting the research community in identifying and addressing ethical issues inherent in research, recognizing that all members of the University share a commitment to maintaining the highest possible standards in research involving humans.

If you are conducting original research, it is vital that you behave in an ethical manner. For example, everyone you speak to must be made aware of your reasons for eliciting their responses and consent to providing information. Furthermore, you must ensure everyone understands that participation is entirely voluntary. Please refer to the following website for more information about McMaster University's research ethics guidelines: <http://reo.mcmaster.ca/>

Organizations that you are working with are likely to prefer that some information be treated as confidential. Ensure that you clarify the status of all information that you receive from your client. You **MUST** respect this request and cannot present this information in class or communicate it in any form, nor can you discuss it outside your group. Furthermore, you must continue to respect this confidentiality even after the course is over.

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### ***ACKNOWLEDGEMENT OF COURSE POLICIES***

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Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) to the various learning activities of MBA BL716 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.

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### ***ARTIFICIAL INTELLIGENCE***

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For further information on the appropriate use of Generative AI, please refer to the course policy posted on Avenue to Learn (A2L).

**COURSE SCHEDULE**  
**BUSADMIN C755: Analytics and Decision-Making in Healthcare**  
**Winter 2026**

Week	Date	Method of Learning	Topic	Assignments	Weight
1	January 7, 2026	In-person (RJC)	Course outline and Introduction		
Module 1: R Basics & Descriptive Analytics					
2	January 14, 2026	In-person (RJC)	Introduction to R Programming	Assignment #1	5%
3	January 21, 2026	In-person (RJC)	Descriptive Analytics & Data Visualization (1)	Assignment #2	5%
4	January 28, 2026	In-person (RJC)	Descriptive Analytics & Data Visualization (2)	Assignment #3	5%
5	February 4, 2026	Asynchronous (A2L)	Analytics BootCamp#1	BootCamp#1	15%
Module 2: Predictive Analytics					
6	February 11, 2026	In-person (RJC)	Predictive Analytics (1)	Assignment #4	5%
	February 18, 2026	none	Winter break		
7	February 25, 2026	In-person (RJC)	Predictive Analytics (2)	Assignment #5	5%
8	March 4, 2026	Asynchronous (A2L)	Analytics BootCamp#2	BootCamp#2	15%
9	March 11, 2026		Final Project Consultation/Finalization**		
Module 3: Prescriptive Analytics					
10	March 18, 2026	In-person (RJC)	Prescriptive Analytics (1)		
11	March 25, 2026	In-person (RJC)	Prescriptive Analytics (2)		
12	April 1, 2026	In-person (RJC)	Final presentation	Final Project	30%
13	April 8, 2026	In-person (RJC)	Final presentation		

\*\* During this week, the groups will finalize their analytical questions and investigations, as well as the datasets and analytical procedures they will use to address their specific projects. They will confirm these elements with the instructor and the teaching assistant to ensure the appropriateness of their final case study project.