

## HM 705 Evaluating Sources of Evidence for Management and Evaluation – Winter 2019

### COURSE DESCRIPTION

This course is designed to provide students with the knowledge and skills to understand and critically evaluate sources of evidence used to support decision-making within a health care environment. Students will develop knowledge about the principles of evidence-based decision-making, searching the literature, and critically reviewing research methods and analyses. The course emphasizes the development of skills to appraise, synthesize and communicate evidence in order to use it to guide management decision-making. Methods of evaluation for this course will include the development of a research question relevant to a current health management issue from your work place, a systematic literature review, a presentation of the findings of your literature review, a presentation to faculty and peers with discussion online, and participation in online course discussions.

### LEARNING OUTCOMES

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

- Define evidence-based practice and its role in health management
- Define evidence-based management and its role in health management
- Develop a focused research question related to a relevant issue
- Use a variety of sources to search for evidence related to management issues
- Understand how levels of evidence and sources of bias can impact how evidence is used to guide health management decision-making
- Critically appraise quantitative and qualitative research
- Synthesize evidence to support decision-making that leads to best practice in health care management practices
- Create an evidence-based summary related to a management issue and relevant to their workplace
- Develop strategies for disseminating and using evidence in health management practice

## COURSE OVERVIEW

There are 13 weeks in this course, and the main topics and learning objectives for each week are outlined below.

### Introduction to Evidence-based Practice and Evidence-based Management

#### *Main Topics:*

- Defining evidence-based practice
- Myths surrounding evidence-based practice
- Key elements of evidence-based health management
- Approaches to developing evidence-based knowledge
- Approaches to becoming an evidence-based decision-maker
- Formulating successful research questions for health management decisions
- Identifying and searching different sources of evidence

### Evaluating the Evidence

#### *Main Topics:*

- Research designs
- Levels of evidence and sources of bias
- Critical appraisal of quantitative research
- Critical appraisal of qualitative research
- Application of evidence from systematic reviews and meta-analyses in health management decisions
- Summarizing and reporting evidence
- Presenting critical appraisal summaries in writing

### Building, Using, Communicating and Transferring Evidence

#### *Main Topics:*

- Addressing cost-effectiveness
- Clinical pathways and clinical practice guidelines
- Knowledge translation, i.e., the Knowledge to Action Framework
- The manager's role in communicating evidence to a range of stakeholders
- Effective knowledge dissemination strategies
- Presenting critical appraisal summaries verbally

## INSTRUCTOR CONTACT INFORMATION

### INSTRUCTORS

|              |  |  |  |  |
|--------------|--|--|--|--|
| <b>Name</b>  | Ivan Florez  | Pat Miller   | Kathryn Wise   | Andrea Cross   |
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### COURSE TEACHING ASSISTANT

### PROGRAM MANAGER

|              |  |  |
|--------------|--|--|
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## MODES OF STUDY

This course is delivered in an online format, using Avenue to Learn (A2L or Avenue) as the principle delivery system. Topics are explored through a review of literature and other online resources, course assignments, case studies and online discussions. Learners are expected to perform as adult learners who will independently read course content posted on the course website, analyze information, share personal experiences, and apply their new knowledge and understanding with their classmates in order to learn from peers and the instructors.

Learners will use course content posted in Avenue to Learn, recommended readings, online resources and texts as resources for learning. Learners will interact online with other learners and the course instructor both asynchronously and synchronously. Typically, discussions will occur asynchronously (not in real time) as this enables learners from different time zones to participate more easily and to organize their learning activities around work, family and personal demands. There will be several synchronous sessions planned throughout the course, including one week where the content will be discussed in an online session (synchronously) rather than as an online asynchronous discussion. These sessions with the instructors will facilitate sharing of ideas and feedback and 1) assist you in the preparation for your first assignment, 2) permit sharing and synthesis of information with peers and faculty, and 3) enable you to share your Assignment Three findings with peers and faculty. The instructor and learners will also maintain regular contact by email as needed.

### Suggested Process

1. Begin each week by reviewing the Learning Objectives.
2. Read the material found in the Content Overview. The Content Overview is similar to a lecture in a traditional university environment- it highlights key points. In this course, the Content Overviews are intentionally kept brief to provide you with more time to review the range of academic learning resources identified, and to participate in the online discussions and/or related learning activities.

3. Review the required reading and resources. Recommended readings will also be suggested, but are not mandatory.
4. Finally, address the Learning Activities through online discussion or as directed.

### USE OF A2L – Student and Instructor Expectations

Students in each course section will be further divided into groups, to facilitate discussion among a smaller number of students. (See the assignment of students to groups on A2L.) Students are expected to share ideas and experiences related to the topics presented during online discussions, and to integrate the content from the required readings/resources in each weekly discussion. Students are expected to post at least one main response to the weekly question(s) and to participate in the overall discussion by commenting on other students' responses (at least 2 times per week; i.e. a total of at least 3 posts per week). Postings should be reflective, concise and respectful. Make sure you are adding value and not simply repeating what others have already said (refer to the Online Discussion document posted in the evaluation section of the A2L site). The course instructors and teaching assistant will limit their online participation so as not to overly influence the direction of the discussion.

A general discussion forum will also be created on the A2L site where students may interact with each other. Instructors and TAs will not be monitoring this area so if you have an important question please email them directly.

**Confidentiality Statement:** To protect the learning environment, all MHM Program participants (e.g. students, teaching assistants, faculty) agree to honour individual and corporate confidentiality. Please regard all information as private, confidential, and/or proprietary and only disclose such information with the prior written consent of the author. Lapses in confidentiality are considered academic [misconduct](#) and could result in change to your status in the MHM Program.

### TECHNICAL REQUIREMENTS

Students require access to a computer that meets the MHM Program technical requirements and access to the Internet on a regular basis. Learners must have an active McMaster email account and web browser. The course will be delivered through McMaster University's A2L platform. Students should become familiar with the various folders on the A2L site for this course.

### TEXTBOOKS AND READINGS

The required readings are noted for each weekly session in the weekly overview document posted. There are no required textbooks, although this online text is recommended:

Greenhalgh, T. (2014). *How to Read a Paper: The Basics of Evidence-Based Medicine* (5th ed.). Oxford, UK: Wiley-Blackwell. Available online at McMaster University <http://site.ebrary.com.libaccess.lib.mcmaster.ca/lib/oculmcmaster/reader.action?docID=10845573&ppg=174>

PLEASE READ THIS TEXT ONLINE AND DO NOT DOWNLOAD IT.

### METHOD OF EVALUATION

Learning comes from readings, online discussion and participation, preparation of assignments, reflection and analysis. Work will be evaluated individually except where group work is expected. In these cases, group members will share the same grade unless all members agree to an adjustment. **Components and Weights**

|   |  |  |
|---|--|--|
| Assignment One – 20%                                    |  |  |
| Description: see document in Learner Evaluation on A2L  |  |  |
| Assignment Two – 40%                                    |  |  |
| Description : see document in Learner Evaluation on A2L |  |  |
| Assignment Three – 20%                                  |  |  |
| Description : see document in Learner Evaluation on A2L |  |  |
| Online Discussion – 20%                                 |  |  |
| Description : see document in Learner Evaluation on A2L |  |  |

### Conversion of Percentage to Letter Grades

|        |    |       |    |      |   |
|--------|----|-------|----|------|---|
| 90-100 | A+ | 77-79 | B+ | 0-69 | F |
| 85-89  | A  | 73-76 | B  |      |   |
| 80-84  | A- | 70-72 | B- |      |   |

The grades of "A" and "A+" are reserved for exceptional levels of achievement by students who, by definition, typically do not represent more than a small minority of the graduate student population or of the students registered in our courses.

## **COURSE CONTENT AND SCHEDULE**

Students should become familiar with the material posted on A2L in the Course Information folder, and in the Learner Evaluation folder. A detailed week-by-week description of the topics, learning activity(ies), and required readings will also be posted.

## **REFERENCING**

All submitted assignments should use formal APA (American Psychological Association) referencing format, 6th edition. Links to summary APA style guides can be found on the A2L course site as well as on the Library website. Referencing within online posts may be less formal (students need to provide sufficient information so that the material referenced may be easily found).

## **PENALTY FOR LATE SUBMISSION**

Deadlines for assignments are set. All work must be submitted to the A2L Dropbox on the due date/time as stated in the Course Outline. Do not submit work by email. Late assignments will be penalized 10% for every 24 hours, or part thereof, they are submitted past their due date and time. If you anticipate being unable to complete an assignment on the due date, please contact the instructor prior to the due date. Requests for extensions will not be considered within 48 hours of the deadline except under extenuating circumstances.

## **ACADEMIC INTEGRITY**

It is the student's responsibility to understand what constitutes academic integrity. Please refer to the University Senate Academic Integrity Policy. This policy describes the responsibilities, procedures, and guidelines for students and faculty should a case of academic integrity arise. A breach of academic integrity is defined as to knowingly act or fail to act in a way that results, or could result, in unearned academic credit or advantage. Please refer to the policy for a list of examples. The policy also provides faculty with procedures to follow as well as general guidelines for penalties. All work that students submit must be own work (original) and include proper citations when work is copied or paraphrased.

### **Turnitin**

A web-based service (Turnitin) to reveal originality may be used. Students are expected to submit their work electronically to the A2L Dropbox. Students who do not wish to have their work assessed through Turnitin must advise their instructor in writing at the beginning of the term. This student will submit their assignment as well as all rough drafts as an appendix to

the instructor using a mutually agreed to process. No penalty will be assigned to a student who does not wish to have their work assessed through Turnitin. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., online search, etc.).

For further information related to the Academic Integrity Policy or the use of Turnitin, please refer to the Office of Academic Integrity at: [www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity).

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#### **STUDENT ACCOMMODATION**

Individuals who may require reasonable accommodation (an individualized adaptation or adjustment made to provide a person with a disability with equitable and non-discriminatory opportunities for participation) are encouraged to contact Student Accessibility Services (SAS). In collaboration with SAS, the student creates an accommodation plan. Prior to the beginning of each course, the student will provide the Course Instructor with the SAS approved accommodation letter. Together we will discuss how each accommodation will be provided. You will be required to follow the policies and procedures of McMaster University, Faculty of Business, and Faculty of Health Sciences. [www.sas.mcmaster.ca](http://www.sas.mcmaster.ca).

#### **POTENTIAL MODIFICATIONS 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 A2L course site frequently during the term.

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