

**SYLLABUS**  
**HRM 736: Design Innovation for Health System Challenges**

Winter 2023, Wed Jan 11 to Wed Apr 12, 2023  
Wed 9:00am-12:00pm, **Room HSC 1J8 (in person)**

**I. COURSE OVERVIEW**

**Instructor:** Dr. Hsien Seow, PhD

Associate Professor, Department of Oncology;

Canada Research Chair in Palliative Care and Health System Innovation;

Office hours: immediately following class or by appointment. [seowh@mcmaster.ca](mailto:seowh@mcmaster.ca)

**Teaching Assistants:** Maggie Civak ([civak@hsc.ca](mailto:civak@hsc.ca))

**Course Description:** This course explores the complex challenges existing within our health system and teaches a design-innovation framework to identify solutions. It uses caregivers for those with advanced chronic disease as the main case study. Initially, the course examines how major health care services are organized and financed in Ontario, Canada, how this affects care, and what are the strengths, challenges, and opportunities in the current system. The course then applies design innovation framework to generate system-level solutions. Students will work in groups to identify a problem, learn about its root causes through interviews, design a solution through analysis, and present a prototype.

**Intended Audience:** This course is an interdisciplinary graduate course (Masters and PhD from all disciplines) including but not limited to HRM, MPH, Nursing, Health Policy PhD, Global Health, Engineering, etc.

**Course Prerequisites:** None.

**Course Objectives**

- To understand how the current complexities within Ontario's health system create systemic challenges for patients, providers, and administrators.
- To understand the value and stages of the human-centered design process.
- To apply this process to generate solutions to current health system issues.

**Course Format:** This is an interactive and applied course, where students learn by doing. Classes will be taught using a combination of strategies, including lectures, discussions, small group activities, interviews, and a course-long group project to understand existing shortcomings and design potential solutions. Each session will help students take a step in the cycle of design innovation, from scoping, learning, designing, and building, and culminating into the final group competition to propose a solution to a real-world problem.

## COURSE TEXTBOOK

### 2 Textbooks:

1. “The Tao of Innovation: Nine Questions Every Innovator Must Answer”, by Teng-Kee Tan, Hsien Seow, and Sue Tan Toyofuku, Imperial College Press, © 2015.
  - on amazon.ca or chapters.indigo.ca or e-book ([www.store.kobobooks.com](http://www.store.kobobooks.com)) or (<http://www.worldscientific.com/worldscibooks/10.1142/p985>).
2. “The Field Guild to Human-Centered Design” by IDEO.org. First edition © 2015.
  - Available as a PDF on course website (i.e. avenue to learn). Or can purchase a hardcopy from <http://www.designkit.org/resources/1>.

### Other readings:

- Other PDF readings will be available online on course website and available as hyperlinks in the reading list (separate document).

## II. COURSE OUTLINE

### Course Sessions At-a-Glance

#	Date	Topic	Assignments Due
1.	Wed Jan 11, 2023	Intro to Course; View of the Future & Laying Big Bets	
2.	Wed Jan 18, 2023	Pain points in the Hospital Sector	
3.	Wed Jan 25, 2023	Pain points in the Homecare Sector	
4.	Wed Feb 1, 2023	Pain points in the Physician Sector	
5.	Wed Feb 8, 2023	Business Models & New Power	
6.	Wed Feb 15, 2023	Intro to Human-Centered Design	Assignment 1
7.	Wed Feb 22, 2023	Develop Interview Guide (and interview)	
8.	Wed Mar 1, 2023	Download	
9.	Wed Mar 8, 2023	Insights	Midterm Paper
10.	Wed Mar 15, 2023	Ideate	
	Wed Mar 22, 2023	No class. “March break”	
11.	Wed Mar 29, 2023	Prototype (and re-interview)	Assignment 2
12.	Wed Apr 5, 2023	Iterate and Purposeful Innovation	Assignment 3
13.	Wed Apr 12, 2023	Design Competition: Final presentations	Final paper * Group presentation*

\*Assignments that are graded as a group

All assignments are due at 9am on the date on this syllabus (start of class). Please submit on Avenue to Learn.

### III. STUDENT EVALUATION AND ASSIGNMENTS

#### **Overview of Assignments, Grading, and Due Dates**

- |                               |       |
|-------------------------------|-------|
| a) Take-Home Assignments      | (40%) |
| b) Midterm report             | (25%) |
| c) Final group project report | (25%) |
| d) Final group presentation   | (10%) |

Details about mini-assignments, midterm report, and final group project and presentation can be found on Avenue.

### IV. COURSE POLICIES

**Syllabus is subject to change.** 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. Updated versions will be posted on course website. Students are responsible for finding out about announced changes if they miss class. 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 website weekly during the term and to note any changes.

**Late assignments.** Assignments are due at the beginning of class on the day on the syllabus (9am) – submitted on Avenue to Learn. Late assignments received within 24 hours of the due date will be docked 5% of the grade assigned. Assignments received between 24 and 48 hours will be docked 10% after which late 5 assignments will no longer be accepted. If you anticipate having problems meeting these deadlines, please contact me before the assignment is due to discuss.

**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 <http://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.

**Attendance Policy.** Due to the interactive nature of the course, particularly the group design challenge, regular attendance is crucial to your success in this course and is expected of all graduate students. Each session builds on the previous one to develop learning and skills. Non-attendance for more than 2 sessions will lead to a failing grade.

The revised HRM Program attendance policy (approved by GPCC, March 10, 2015) and is the minimum requirement for the HRM Program; students should refer to the individual course attendance policy in case there are additional course requirements re: attendance. The HRM Program Attendance Policy includes the following:

- Any absence must be due to a reasonable excuse that is exceptional and out of the control to some extent of the student (illness, death in family, special exams etc).
- One absence from a class with a legitimate excuse is reasonable, 2 may be acceptable at the discretion of the instructor, but if you miss 3 or more classes you will not obtain credit for the course. You will be required to withdraw from the course before the last drop deadline or you will receive an 'F' in the course.
- Attendance is considered in the assignment of participation grades. In cases where participation is credited for each session, you will normally receive 0 for participation for any day you are absent.