



FALL 2017 – WINTER 2018

ECE 7650 – Agent Based Modeling

COURSE DESCRIPTION:

Project based course on agent based modeling. This is a 3-credit hour graduate course in ECE which is presented / conducted through an entire Academic Year (i.e. held in both the Fall and Winter Terms).

COURSE OBJECTIVE:

Develop and discuss agent based models, with emphasis on real data inclusion and model validation and verification.

PRE-REQUISITES:

Programming skills

CONTACT HOURS:

3-hours per week spanning both Fall & Winter terms

COURSE CONTENT:

Develop and discuss agent based models.

Additional advanced research topics as determined by the instructor.

HOMEWORK:

Develop a framework for a common ABM during the first month. Develop one's own ABM for the remainder of the course. 3-5 class presentations and participation during guest lectures. Ideally development of each student's ABM should contrast related thesis oriented work.

TEXTBOOK:

None. Several papers posted as required reading/studying.

EVALUATION:

Your final course grade is determined by your performance in assignments, seminar, and course project. Ideally the student project will target a publication like report, whether actually published or submitted is not material. The weighting of each of these components is as follows:

COMPONENT	NO	VALUE %	TOTAL VALUE	DETAILS / ADDITIONAL INFO
Seminars	3			Given by other doing ABM related research
Homework/Assignments	3	10%		
Project	1	90%		
TOTAL		100%		

INSTRUCTOR INFO:

Name: Bob McLeod
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Tel: (204) 474-7360
Email: Robert.McLeod@umanitoba.ca

Office Hours: By appointment

VOLUNTARY WITHDRAW:

Friday, 17 November 2017

REQUIREMENTS/REGULATIONS

Student Responsibilities: It is the responsibility of each student to contact the instructor if he/she is uncertain about his/her standing in the course and his/her potential for receiving a failing grade. Students should also familiarize themselves with Sections 4 and 6 of the Regulations dealing with, among others, incomplete term work, deferred examinations, attendance and withdrawal, etc..

Lectures: Attendance at lectures is essential for successful completion of this course. Students must satisfy each evaluation component in the course.

ACADEMIC INTEGRITY

Students are expected to conduct themselves in accordance with the highest ethical standards of the Profession of Engineering and evince academic integrity in all their pursuits and activities at the university. As such, in accordance with the General Academic Regulations and Requirements of the University of Manitoba, Section 7.1, students are reminded that plagiarism* or any other form of cheating is subject to serious academic penalty (e.g. suspension or expulsion from the faculty or university) regardless of media

- examinations
- assignments
- laboratory reports
- term exams

A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty

Please refer any questions regarding Academic Integrity to your course instructor.

***Plagiarism:** to steal and pass off (the ideas or words of another) as one's own; use (another's production) without crediting the source