

## **MAT 3395: Introduction to Mathematical Models**

**Professor:** Dr. Stacey Smith? (the question mark is part of my name)

**Email:** stacey.smith@uottawa.ca

**Lectures:** Tuesdays 11:30–12:50 in CBY B202 and Fridays 1:00–2:20 in SMD 427. The first week will be on Zoom. Login details are found in Brightspace. In-person classes will resume January 16. Note that there are no classes on public holidays or during reading week.

**Office hours:** Wednesdays 10:15–11:30 or by appointment in STEM 529.

**Textbook:** *Modelling Disease Ecology with Mathematics* (second edition) by Stacey Smith? (American Institute of Mathematical Sciences, 2017). Available free online.

**Content:** We will cover a variety of topics on mathematical modelling of infectious diseases using Matlab (simple epidemics, the basic reproductive ratio, vector-borne diseases, curve-fitting, bifurcations, chaos).

**Assessment:** Weekly assignments (20%), Midterm (40%), Project presentation (15%), Final project (25%)

**Midterm:** Tuesday, March 26 (11:30am)

**Class Etiquette and Respect:** We all depend on a climate of mutual respect and engagement to make this a productive and exciting intellectual environment. Please respect these basic guidelines.

**Grade changes:** If you feel there is a problem with your grade on an assignment or midterm, you must write one paragraph explaining each error. This can be done in the body of an email or as an attachment.

**Plagiarism:** Please note that the University of Ottawa has a very strict policy on plagiarism and academic fraud. If you are found guilty of either, the University can give you an F for the course, assign additional credit hours on top of your degree requirements, and/or expel you from the University and note the reason on your transcript. This includes copying other assignments, or reproducing any work from another source without citation. Please read the University policy on academic fraud included with the course material and ask me if there is anything you do not understand or consult <http://sass.uottawa.ca/sites/sass.uottawa.ca/files/plagiarism.pdf>. Any students caught cheating during a test will have their cases referred to the Faculty.

**Note:** Any changes or announcements will appear in Brightspace. It is your responsibility to check for announcements.

**Language:** All students have the right to produce their written work and to answer examination questions in the official language of their choice.

**Harrassment:** The University of Ottawa does not tolerate any form of sexual violence. Sexual violence refers to any act of a sexual nature committed without consent, such as rape, sexual harassment or online harassment. For more information, visit [www.uOttawa.ca/sexual-violence-support-and-prevention](http://www.uOttawa.ca/sexual-violence-support-and-prevention)