Land Acknowledgement

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the Musqueam. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on culture, history, and traditions from one generation to the next. I encourage you to learn more at UBC's Indigenous Portal, `http://indigenous.ubc.ca`, and on the Musqueam's website, `http://musqueam.bc.ca`.

Who am I?

- **My name:** Laurent MacKay (he/him/his)
- **Position:** Postdoctoral Research Fellow
  - **My research:** Mathematical Biology (applied differential equations)
- **Office (student) hours:** TBD:
  `https://www.when2meet.com/?21070285-YbEHX`
- **Contact:** Canvas messaging system or email: lmackay@math.ubc.ca

What will we learn?

How to solve Ordinary Differential Equations!

- Analytically
- Numerically with MATLAB

Course Structure

Every week:

- Attend class!
  - I'll do some exercises, you do others with neighbours (bring something to write with)
  - Asking questions is encouraged
  - Weekly quizzes on Wednesdays!
- I will post recordings on our Section's Canvas page, along with skeleton and annotated lecture notes
- Check Canvas for important information including textbook, grade breakdown, assignment due dates, and other resources

MATH 215/255: Grade Breakdown

- 10% WebWork
  - Weekly starting Sep. 19^{th}.
- 5% MATLAB HW Assignments
  - Due with Webworks 1,2,3,5,8, & 9.
  - Also starting Sep. 19^{th}.
- 85% Mastery Score
  - First quiz on Sep. 20^{th}

Mastery-Based Grading

- Course is broken down into 16 Learning Outcomes, each of which you will be given the opportunity to demonstrate 'Mastery' of throughout the course during:
  - Weekly in-class quiz (each testing 1-2 Learning Outcomes)
    - End of class on Wednesdays
  - In class retest 1
  - In class retest 2
  - Final exam
- Nearly perfect answer = 'Mastery'.
- On the right track = 'Progressing'
- Very incomplete answer ='Beginning'

Your final Mastery Score is the percentage of Learning Outcomes that you have scored 'Mastery' on by the end of the course.

Advantages/Disadvantages of Mastery-Based Grading

- Pros:
  - If you do well on all the weekly quizzes you don't have to write either In class retests or the Final exam
  - You control your grade and can earn the grade you want
  - Your grade will never go down

- Things to watch out for:
  - Study for the weekly quizzes! You won't have time to obtain 'Mastery' on all the Learning Outcomes during the In class retests or Final exam, so you want to obtain 'Mastery' on at least some of them during the quizzes
  - You can't get by on part marks, you actually have to know how to solve a problem to obtain a 'Mastery' score on a Learning Outcome

For next class...you will need access to MATLAB

1. Create a MathWorks account
   - Go to matlab.mathworks.com
   - Click "No account? Create one!"
   - Enter your UBC email address and follow the instructions
     - You can obtain one from here using "Activate Student Email"
   - Note it may take a few hours to activate your MathWorks account

2. Use MATLAB Online
   - Go to matlab.mathworks.com
   - Sign in with your UBC email address and MathWorks password