

Bachelor of Engineering Program Meeting September 6, 2022

UNIVERSITY
of GUELPH

IMPROVE LIFE.



Welcome to Engineering

Dr. John Runciman
Director, School of Engineering



$f(x) = x^2$
Find the derivative

$$\frac{g(x+h) - g(x)}{(x+h) - x} = \frac{g(x+h) - g(x)}{h}$$

$y = g(x)$
Secant Lines

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$$

$$f(x) = \lim_{h \rightarrow 0} \frac{(x+h)^2 - x^2}{h}$$
$$= \lim_{h \rightarrow 0} \frac{x^2 + 2xh + h^2 - x^2}{h}$$

$$= \lim_{h \rightarrow 0} \frac{2xh + h^2}{h}$$

$$= \lim_{h \rightarrow 0} \frac{h(2x+h)}{h}$$

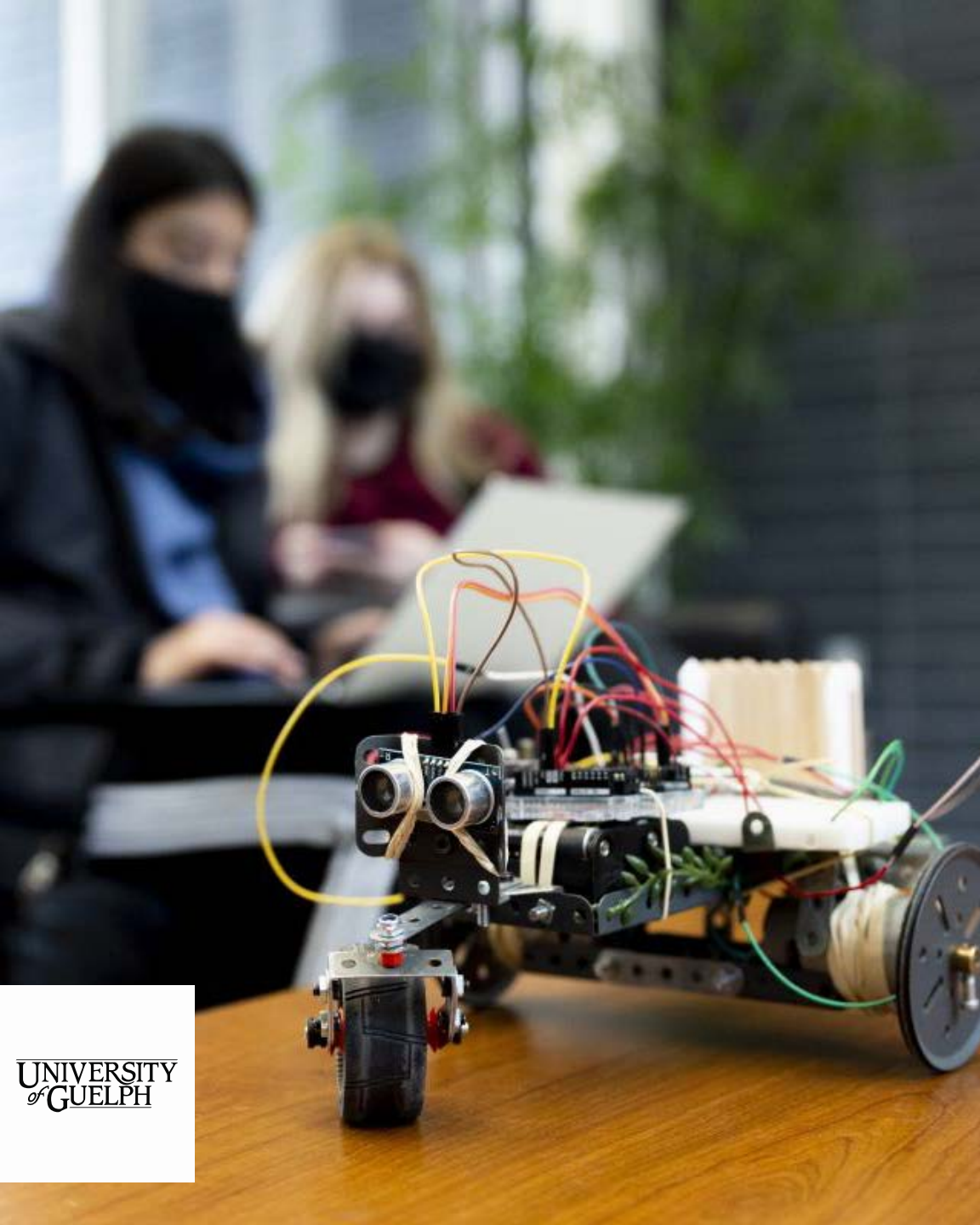
$$= \lim_{h \rightarrow 0} (2x+h)$$

You might be surprised to know that...

You love calculus!

Dr. Matt Demers
Department of Mathematics and Statistics
Your MATH*1200 instructor





During your time here, you will...

Discover what is good design.

—

Dr. John Donald and Dr. Steve Mattucci
School of Engineering
Instructors for ENGG*1100 – Engineering Design 1



Semester 1 Courses

Common Core for All Engineering Programs

REQUIRED

MATH*1200 – Calculus 1

CHEM*1040 – General Chemistry 1

**PHYS*1130 – Introductory Physics
with Applications**

ENGG*1100 – Engineering Design 1

PLUS ONE MORE

**ENGG*1500 – Engineering Analysis
(BIO, BME, ENVE, WRE)**

**CIS*1500 – Introduction to Programming
(MECH, Undeclared)**

**ENGG*1410 – Introductory Programming
for Engineers (CENG, ESC, Undeclared)**

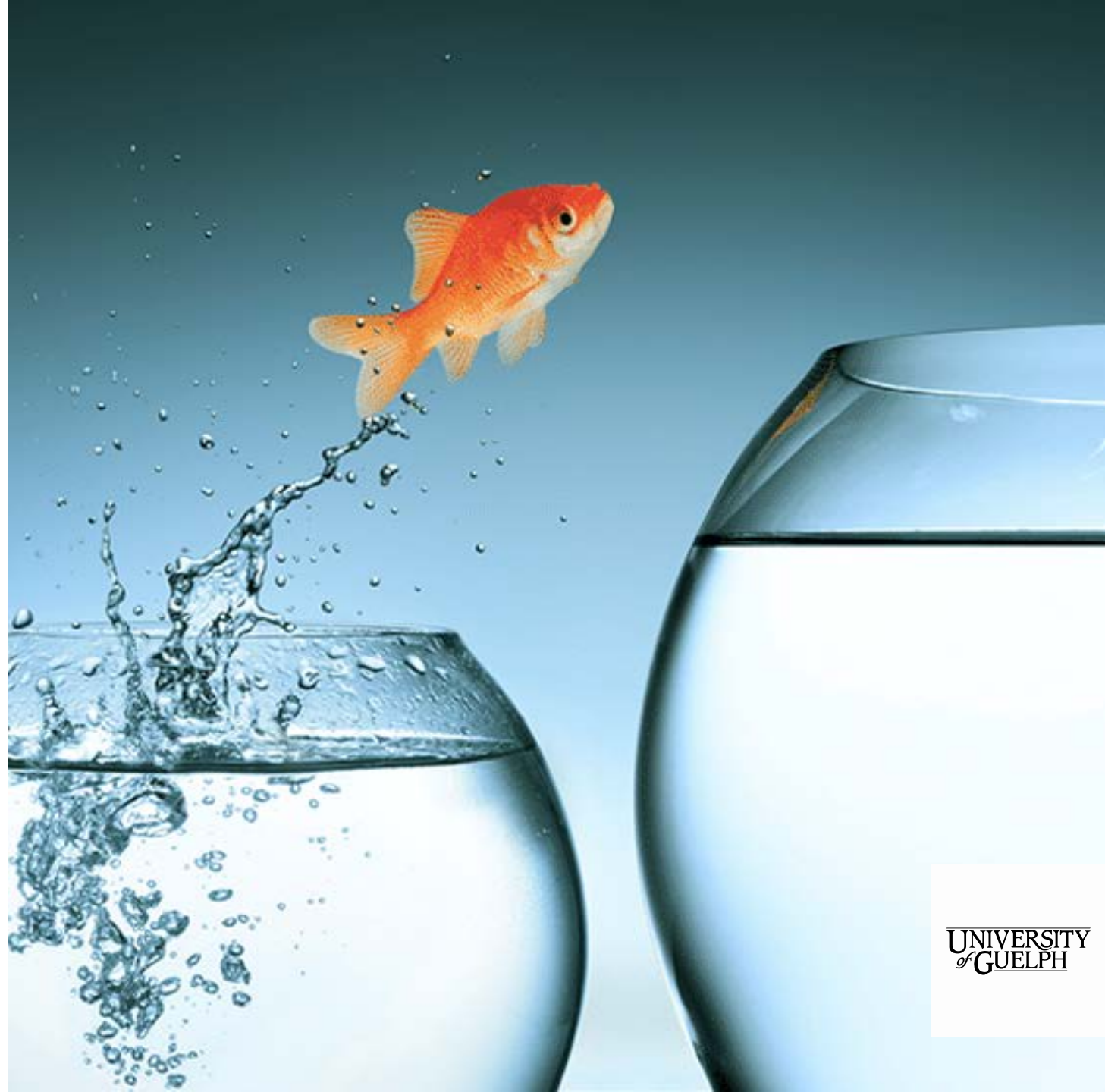
**Please talk with a Program Counsellor if
you are unsure.**

DO NOT TAKE HIST*1250 OR ENGG*1070 YET. THESE ARE FOR A FUTURE SEMESTER.

You might be wondering...

What is 1st Semester Like?

- Expect first semester to go quickly. You will have review in the 1st week and then you will learn new material.
- You will have to figure out how to handle the many deadlines for assessments. Make a calendar for your semester including the time you spend on studying for each course.
- Finding a good peer support network is essential. Get to know other people in your program.
- You will be learning foundational material in this first semester. It is important you spend the time to ensure you are comfortable with the content.
- Your grades will be lower than what you received in high school. That is normal for most students.
- Get into good habits. Eat well. Sleep enough. Get exercise.





If you are struggling you can get ...

Academic Support

Your Program Counsellors (Kim, Katherine and Andrew) are your first stop with getting academic advice and support. They can help you get connected with:

- Engineering Peer Helpers
- Accessibility Services
- SLGs (Supported Learning Groups)
- Student Athlete Mentor Program
- Learning Services (Workshops, One-on-one academic coaching, Academic Action Program)

Email: engcouns@uoguelph.ca

We have both in person and online appointments available throughout the week.



Introduce yourself to the person on your left.

Hello My Name is _____

I'm from _____

I'm in _____ program.

What are you looking forward to this week?

Challenge: Try introducing yourself in every class. Pretty soon, you'll have a good peer network of friends.



If you are struggling you can get ...

Health Support

Your physical and mental health are essential to doing well during your time in university and beyond. Make use of services available including:

- Counselling – Student Wellness Navigator
- Student Health Services
- Health and Performance Centre
- Student Support Network
- Wellness Education and Promotion centre
- Student Accessibility Services
- Sexual and Gender Based Violence Support and Education

Contact a Student Wellness Navigator in the J.T. Powell Building to better understand resources available to you.



Cooperative Education

- Attend Career Nights and Job Fairs.
- If you want to apply to co-op, deadline is last class day of Winter Semester.

Courses

- Winter course selection starts in November.
- Make sure you understand that some courses require pre-requisites
- Summer semester courses are available for some electives.

Electives

- Mechanical students take first elective in 2nd semester. Other programs start in 2nd year.
- Talk with program counsellors to discuss options.

Transfer

- Contact your Program Counsellor if you are considering a different engineering program or a different degree.

Exams

- Note that exams are scheduled after your classes are completed.
- Exams runs for two weeks in December.

Probation

- Maintain a 60% average to not be on academic probation.

What else should you know?



Meetings for Majors

TOMORROW, SEPTEMBER 7

1

Biological / Biomedical

10 AM
THRN 1200

2

Environmental /
Water Resources

10 AM
THRN 1307

3

Computer /
Systems and
Computing

11 AM
ALEX 100

4

Mechanical

11 AM
THRN 1200

If you have any questions, contact your Engineering Program Counsellors.

Email: engcouns@uoguelph.ca

Web: <https://www.uoguelph.ca/engineering/current-undergraduate-students/>

