This session will be recorded. Please have your microphones muted.

Thank you!
AGENDA

- Introduction
- TA expectations and responsibilities
- Giving effective feedback: Part 1 - Marking tools
- Break
- Giving effective feedback: Part 2 - Marking skills
WHO ARE WE?

Benoit Charbonneau - Associate Dean of Undergraduate Studies
Adam Kolkiewicz - Associate Dean of Graduate Studies
Jordan Hamilton - Director of the Tutorial Centre
Paul Kates - CTE Faculty Liaison for Mathematics
Dan Wolczuk - Lecturer in the Dean of Mathematics

Carmen Bruni - Lecturer in the David R. Cheriton School of Computer Science
LEARNING OBJECTIVES

By the end of the online training and the first half of this workshop, you should be able to:

- List general responsibilities of TAs and expectations
- Recognize and report breaches in academic integrity
- Summarize proctoring expectations and duties
- Identify traits that make a strong TA
- Respond to harassment and discrimination (+ online)
- Respond to student behaviours

Note: this workshop will introduce you to the fundamentals of TAing in Math (Math courses and department specific), but expectations and responsibilities will differ between instructors, courses, units, etc.
WATERLOO GRAD READY (LEARN)

Two TA training modules:
1. Preparing to TA at Waterloo (CTE1210)
2. Teaching Online: Basic Skills for TAs (CTE1406)

Objectives:
- Introduction to teaching and learning
- Role of TAs
- Tips for success and useful resources available for teaching development
- Considerations for academic integrity, privacy, and copyright
MUO = Math Undergrad Office

Fall 2020 – MATH will have over 6,400 undergrad (~2,600 new)

All Undergrad students in Math must take a large set of core courses.

ADUG responsible for assigning above 200 graduate TAs in fall and winter (and a bit less in spring) to 33 core and service courses.

Approximately $2,000,000 in support to teaching mission through teaching assistantships last year.

ADUG is your employer as a TA.
This is not proctoring.
$100,000
WHY TA?

You are part of a team supporting the Undergraduate Teaching Mission of UW!

Build presentation and teaching skills

Develop interdisciplinary skills (with students, instructors, other TAs, etc.)

We need you! Instructors rely on you to support their teaching

Students need you! Student rely on you to support their learning.
TA ASSIGNMENTS AND FIRST STEPS

- Student’s preferences, skills, knowledge, qualifications, and previous TA performances are taken into account when students are assigned a course as TAs.
- Most students are assigned to either a faculty course (e.g., MATH###) or a course from their respective units (e.g., CO###, AM###, PM###, CM###, etc.)
- Graduate students that are starting their degrees at UW will typically be assigned duties as a Marker in their first year
  - Training provided here by the Math Undergraduate and Graduate Office
- Contact/meet with your course coordinator/instructor
TA EXPECTATIONS AND RESPONSIBILITIES

- Breakdown of hours
  - One TA unit = ~ 5 hours/week over 16 weeks = 80 hours
  - Two TA unit = ~ 10 hours/week over 16 weeks = 160 hours
  - Hours may not be evenly distributed throughout the term
- Expect to be available from the first day of class until grades have been submitted
  - Note that the last day of exams is Dec. 23 so you might have to mark quite late.
- Time needed to learn course material is not included in these hours, unless otherwise stated by your instructor
- If you cannot fulfill your duties (e.g., illness, attending a conference, etc.), please contact the course coordinator/instructor
TA DUTIES

Some responsibilities are:

- Marking
- Proctoring
- Giving oral exams
- Office hours
- Tutorials
- Record grades
- Write solutions
- Monitor discussion boards
- Etc. (be sure to ask your instructor)
TA EVALUATIONS

- Every grad TA will be evaluated at the end of each course
- This information will be shared with the units involved
- Goal is to give you constructive feedback
- The categories include:
  - Overall
  - Quality of Work
  - Timeliness
  - Communication
COVID-19 SPECIFIC INSTRUCTIONS

You may be in town, your students may be in town... yet

You will not need to come to campus for TA duties

All office hours, if any, will be held online

Do not meet students in person (both on campus and off campus)
WHAT IS LEARN?

▪ **LEARN** is the University of Waterloo’s learning management system. Students who take fully online and face-to-face courses access their course materials through LEARN.

▪ How and when do I get access to LEARN? Log in using your WatIAM credentials. It may take a few days to add your WatIAM account to the LEARN system and then to add you to the course itself.

▪ Difficulties logging into LEARN?
  ▪ Contact your instructor first to confirm whether the request has been sent. Otherwise, contact the LEARN Support Team (learnhelp@uwaterloo.ca) or Paul Kates (pkates@uwaterloo.ca).
WHAT MAKES A GREAT TA? WHAT MAKES A BAD TA?

Some of our ideas:

- Caring (realistically everything else is a subset of this)
- Responsible
- Diligent/punctual
- Inquisitive (Don’t just accept the status quo)
- Have effective communication
- Confidence
What to do if students are caught cheating and the chain of command:

- Please review Policy 71 - Student Discipline
- Assignment:
  - Collect the evidence
  - Inform your instructor/Coordinator
RESPONDING TO DISRUPTIVE OR EMOTIONALLY CHARGED STUDENTS

In general:
- Be calm and courteous
  - Lose your temper = Lose your credibility
- Give students the benefit of doubt
- Focus on the behaviour, not the student
- Don’t take disruptions personally
- Talk to students one-on-one/email

Tips:
- Safety first!
- Recommend Campus Services
  - Counselling, Health Services, Student Success Office, AccessAbility Services, 
    Campus Police (ext. 22222)
- Calm students down - ask them to take a seat or you can stand and have water/tissues handy
- Ask to understand the student (e.g., why do you need this mark?)
QUESTIONS?
GIVING EFFECTIVE FEEDBACK

Part 1: Marking tools
Part 2: Marking skills
WHAT IS THE TUTORIAL CENTRE?

▪ The tutorial centre is a place where students can drop-in to get help with their courses.

▪ It is located in MC 3022.

▪ It contains some of the highest quality tutors that UW has to offer (that's you!).

▪ Note that the Tutorial Centre is NOT open this fall (2020) due to the current global pandemic, but it is a place you may work in future years.
THE JOB (DURING NORMAL TERMS)

- Helping students in the Tutorial Centre.
- The tutorial centre opens on the second week of classes.
- During normal terms, you get an email explaining how to signup for your time slots, if you are working in the Tutorial Centre.
- Wear your name tags! Tutors not wearing name tags will be considered absent since students will not be able to tell you're a tutor.
- Scan your watcard to sign in! This is how we will track that you made it to your shift.
ANSWERING QUESTIONS

- Rather than in-person, you may be asked to help answer questions online this term (on discussion boards like Piazza or during live scheduled office hours).
- Study the solutions in advance, if you see mistakes then point them out to the course coordinator.
- Don't just tell the students the solution. Give hints on how to start or keep going if they are stuck. Maybe tell them what concept or strategy might be useful.
- You can also work through a similar example with them so they can see how it is done.
ANSWERING QUESTIONS

▪ Be encouraging, congratulate them when they've solved a problem well or figured out a problem that was giving them trouble.

▪ Don't be insulting or mocking! We don't want to discourage students from coming back.

▪ There may be other ways to solve a problem different from the solutions you are given, make sure you check their work carefully and see if what they have done is correct.
LEARN’S VIRTUAL CLASSROOM

- Learn has a built-in tool for hosting classes or office hours.
- Part of your duties may be to host live office hours on Learn.
- If you have a tablet, whiteboard, or some other method for writing so that students can see, that would be preferred.
- Still, treat these questions the same as you would in-person: help students work through the problems themselves.
PIAZZA

- Piazza is an online message board system that accepts LATEX for answering questions. You may be asked, as part of your duties, to help answer questions on Piazza.
- Instructors, TAs, and other students can answer questions.
- Follow-up questions/discussions are common.
- Treat these questions the same as you would in-person, don't just give answers, help them work through the problems themselves.
- Additionally, don't post or allow students to post full assignment problem solutions before it's due.
- You don't have to answer the questions extremely quickly either, giving students a chance to help each other or to answer their own question is a good idea.
Crowdmark is an online marking system which can make marking more efficient (no more shuffling papers, and you can mark from any computer).

- You will receive an email inviting you to grade an assignment.

- The submissions are arranged in a grid. Each row represents one student, with one question per column. So when you are marking, you will typically mark down a column (for example, marking all of question # 2).

- The system is fairly simple and intuitive but the online help and tips are generally excellent. Other TAs and instructors will all know how to use the system, so if you have any questions feel free to ask them.
My email address is j4hamilt@uwaterloo.ca. Never hesitate to contact me if you have questions.
**MARKING ACTIVITY**

Mark the paper in front of you on a 3 point scale
- Give a mark of 0, 1, 2 or 3
- Access the poll through the chat within the meeting

Then, do the same thing with the same questions but use the marking scheme.
REFLECTION

Think back in your personal experiences:

- What is the most useful feedback on a math assignment you’ve received?
- What made it useful?
EVALUATION VS. FEEDBACK

Evaluation

- What words first come to mind when you think of the term “Evaluation”?
- Comparison to a standard
- Assessment
- Informs student performance

Feedback

- What words first come to mind when you think of the term “Feedback”?
- Modify thinking or behaviour
- Actionable information
- Improves student learning
MARKING EXAMPLES

\[ \int x \arctan x \, dx \]

\[ \begin{align*}
0/5 & \quad \text{let } u &= \arctan x, \quad du = \frac{x}{1+x^2} \, dx \\
& \quad \frac{x^2}{2} - \int \frac{x}{2} \, dx \\
\times & \quad \text{can't solve}
\end{align*} \]

\[ \int xe^x \, dx \]

\[ \begin{align*}
0/3 & \quad \text{let } u &= e^x, \quad du = e^x \, dx \\
& \quad \frac{x}{2} e^x - \int \frac{e^x}{2} \, dx
\end{align*} \]

\[ \int \frac{x^2 + 1}{1 + x^2} \, dx \]

\[ \begin{align*}
3.5/5 & \quad \text{let } u &= \arctan x, \quad du = \frac{x}{1+x^2} \, dx \\
& \quad \frac{x^2}{2} - \int \frac{x}{2} \, dx \\
\times & \quad \text{can't solve}
\end{align*} \]

\[ \int \frac{x^2 + 1}{1 + x^2} \, dx \]

\[ \begin{align*}
1/3 & \quad \text{let } u &= e^x, \quad du = e^x \, dx \\
& \quad \frac{x}{2} e^x - \int \frac{e^x}{2} \, dx
\end{align*} \]

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& \quad \frac{x}{2} e^x - \int \frac{e^x}{2} \, dx
\end{align*} \]
GIVING EFFECTIVE FEEDBACK

- Avoid Binary Marking
- Spend your time on big-picture concerns
- Include justification for why their work is “poor/good/great”
  - If you had turned in this work, what feedback would you want?
- Actionable information
- Be consistent (make a list of special cases)
- Be constructive
- Report common errors/mistakes to the instructor (be proactive)
- Do the problems that you will mark before you start marking
ACADEMIC INTEGRITY

- Clarify expectations with course coordinator at the beginning of term
- Alert the course coordinator of possible cases
- DO NOT take disciplinary action
FINAL TIPS

- Back up all electronic records
- Don’t post marks or dispose marked assignments publicly
  - Violates Canadian Privacy Law
  - Post online to D2L
- Communicate with your course instructor
- Do not rush your marking but be mindful of your own time
  - Let the instructor know if you think you will go over hours
- Pace yourself and take breaks
QUESTIONS?
THANK YOU!

Slides and additional information will be available on the TA Training Website.