



Teaching

Innovation

Creativity

# Teaching at the University of Waterloo |

| A Manual for Teaching Assistants

UNIVERSITY OF  
**WATERLOO**



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## Welcome from the Associate Provost, Graduate Studies



Welcome to teaching at Waterloo! Teaching assistants play a vital role at our university. First and foremost, they enhance the experience of students in classes and complement the work of faculty instructors. Teaching assistantships also provide graduate students with the opportunity to develop their own skills in the classroom.

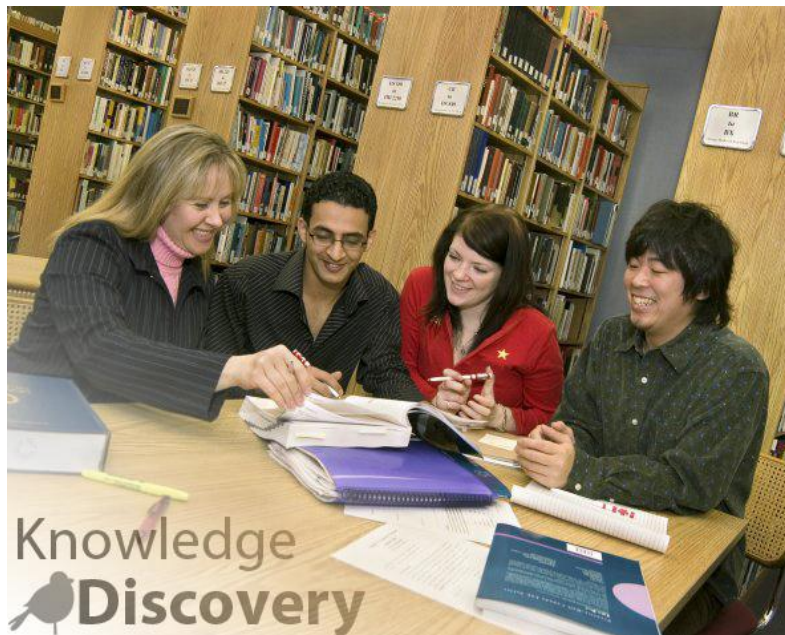
The purpose of this manual is to provide materials to supplement the resources available in Departments. Thank you to those of you who are reading and using this manual, both to teaching assistants and to faculty and staff colleagues. Thank you for using these materials to enhance teaching at the university, and for the care and pride you are taking in doing your best to enhance excellence in teaching at the University of Waterloo.

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## Introduction

This manual is designed to help you prepare for your teaching role at Waterloo and to have a successful experience as a teaching assistant. It outlines typical roles and responsibilities of TAs, directs you to university policies relevant to TAs and discusses the essentials of university teaching.

The teaching content of this manual (sections 3-7) is based heavily on the popular collection of [Teaching Tips](#) developed by Waterloo's Centre for Teaching Excellence (CTE). Teaching Tips are succinct documents that describe useful ideas and practical methods for effective teaching. We hope that first-time TAs will find the manual helpful for answering many of the questions that arise when teaching for the first time. More experienced TAs can also use the manual to obtain new ideas and learn different teaching approaches.



## 1. University-wide Information for TAs



### 1.1 How TA Positions are Funded

Teaching Assistantships (TAs) are usually provided from university operating funds, and are allocated by departments in return for specific services in support of their teaching programs. In accepting the offer of admission and financial support, a student agrees to perform the duties required for the support provided.

The student must also satisfactorily perform the particular duties required for the support. TA performance is assessed by the instructor, department chair or graduate officer. A student whose performance as a TA is judged to be unsatisfactory will normally receive written warning and suggestions for improvement. If the student's performance does not improve sufficiently within a reasonable time period, financial support may be reduced or discontinued. Written warning and an opportunity for improvement need not be given in cases of serious misconduct or serious neglect of duties.

### 1.2 TA Employment, Duties and Rates of Pay

Through the university, full-time students can accept on average at most ten hours of paid employment per week, unless the employment is directly related to their degree programs. The ten-hour maximum applies to the total time required for TA and RA duties.

Graduate students with full responsibility for teaching courses must be appointed as part-time lecturers and reported to Senate. The minimum rate for graduate students teaching courses is specified in a table of UW compensation rates that is updated annually.

Graduate teaching assistants are graduate students who do not have full responsibility for teaching courses, but who are appointed to carry out teaching-related duties, such as proctoring, marking, tutoring (including language tutoring), laboratory supervision, and occasional lecturing. Other duties may be assigned with the agreement of the instructor, the department chair or graduate officer, and the graduate student.

At the beginning of each term departments shall inform teaching assistants of their assignments and the nominal hours of work expected over the term. The nominal hours of work is an estimate of the time, including preparation, that would normally be required by a graduate student to carry out the assigned duties. It is the department's responsibility to ensure that adequate preparation time is allowed for; it is the graduate student's responsibility to be prepared.

It is the instructor's duty to meet with her/his TAs at the beginning of the term for advance discussion of the work expected, the methods to be used in evaluating the TA's work, and the scheduling of duties throughout the term. TA duties extend from the date lectures begin until the due date for course marks and may be distributed unevenly over the term. However, the maximum hours of work required in any one week should not normally exceed twice the nominal weekly hours. Anticipated excessive fluctuations shall be clearly identified at the time of course assignment. Graduate student employees shall identify to the employer any known academic obligations that may interfere with their duties. If unreasonable demands interfere with a student's own academic program, he/she should speak with the department chair. Except in emergencies, teaching assistants should receive at least one week's notice of special duties such as proctoring or lecturing.

The university sets [TA rates](#) which apply to all faculties. TA rates are reviewed annually; the approved change shall normally be applied to all TA rates effective May 1 of each year.

### **1.3 TA Health, Safety and Environment Training and Responsibilities**

It is the department's responsibility to ensure that adequate training is provided to all graduate students, regardless of whether they are employed as teaching or research assistants. Graduate students should not start TA or RA duties until they have undergone the department's training program.

Effective January 2009, all TAs are required to complete an on-line health, safety and environment orientation training program (~1.5 hours) developed and offered by the Safety Office either as a stand-alone module or as part of a faculty's TA training. The program will contain core health, safety and environment information, including: legislative rights; duties and responsibilities; applicable University of Waterloo policies, procedures and guidelines; emergency procedures (fire and injury/illness); personal safety and security; hazardous materials -- Workplace Hazardous Materials Information System (WHMIS) offered as either awareness training (employees who have little contact with hazardous materials) or competency training (employees who have regular contact with hazardous materials). This



training program is intended to complement department and/or faculty-specific WHMIS hazardous material training. It is not a substitute.

## 1.4 Dispute Resolutions and Appeals

The relationship between a teaching assistant and his/her instructor is based on collegiality and mutual respect. As it is in the best interests of all parties to address concerns informally and in a timely manner, a TA is encouraged to communicate with his/her instructor when a question arises about a decision or action affecting him/her. This communication can be either in person or in writing and must be done within one month of the decision/action.

- If the instructor requires it, the TA shall put the communication in writing.
- The instructor shall respond within 10 working days of receipt of the communication.
- If the TA is satisfied with the response, the matter is at an end.
- If a TA is not satisfied with the result, he/she may seek a resolution by taking the issue to the department graduate officer/associate chair within 10 working days of the instructor's response.
- If a TA is not satisfied with the result, he/she may take the matter to the associate provost, graduate studies, who will consult with the relevant associate dean, graduate studies within the faculty, within 10 working days of the graduate officer's/associate chair's response. The decision of the Associate Provost, Graduate Studies is final.

The TA and instructor are each entitled to be accompanied by a University of Waterloo colleague of his/her choosing as a support person at any meeting.

Graduate officers/associate chairs and the Associate Provost, Graduate Studies are expected to report to the Graduate Operations Committee and the Graduate Student Relations Committee the sanitized details of any issues with which they have dealt. The purpose of this is to identify recurring or systemic problems with a view to resolving them. Reports should occur regularly, ideally at the end of each term.

Note: Sexual harassment, discrimination and abuse of supervisory authority are covered by [Waterloo Policy 33, Ethical Behaviour](#).

## 2. University Policies and Guidelines for TAs



As a TA, it is your responsibility to follow university policies and procedures related to teaching prior to the start of your teaching assistant appointment. These policies are located on the Secretariat's website. Below is the list of policies that you must be aware of.

[Policy 19 - Access to and Release of Student Information](#)

[Policy 33 - Ethical Behaviour](#)

[Policy 34 - Health and Safety](#)

[Policy 69 - Conflict of Interest](#)

[Policy 70 - Student Petitions](#)

[Policy 71- Student Discipline](#)

[Policy 72-Student Appeals](#)

[Policy 73- Intellectual Property Rights](#)

[Copyright at the University of Waterloo](#)

### 3. Teaching Tips



#### 3.1 TA Checklist: Questions to Ask

Whether you are a new TA or an experienced TA for a course that is new to you, you need to know exactly what your responsibilities may be. The following is a list of questions to help you clarify your role and develop effective communication with the course instructor.

##### *Course management*

- What can you tell me about the course? (syllabus, learning objectives, demographics, learning activities)
- What is my role? Will I be doing guest lectures, running tutorials, conducting labs, and/or grading?
- How often will I be performing any of the above roles?
- How does my supervisor define my role? (e.g., what is involved in running a tutorial?)
- Are there other TAs involved with this course? How will we ensure consistency for our students?
- Do you expect me to attend lectures?
- What should I do, whom should I contact, if I am unable to attend a class/tutorial?

##### *Communication during the term*

- Is there an expectation that we communicate regularly by email?
- How often will we meet to discuss my work?

### *Office hours*

- How many office hours should I hold and when?
- If I am to give individual assistance, how much help is too much?
- What kind of assistance should I not give?
- Should I organize group help/review sessions?

### *Assessment*

- If I am to evaluate/grade papers, projects, reports, quizzes, and/or exam, are the criteria for assigning grades clear?
- Will I have any input on exam/assignment construction?
- Is the process/formula for determining a final grade clear?
- How quickly do you expect problem sets/assignments/exams to be returned to the students?
- Should we meet before I begin grading papers/exams?
- Who reviews disputed grades?
- Should I make two copies of all grades?

### *Policies and protocols*

- What is the protocol for cases involving breaches of academic integrity?
- What are the course policies with regard to late assignments, missed classes, plagiarism, cheating and appeals?

Getting answers to these questions may take time, but knowing the answers will help you approach your new task with confidence. Avoid being caught short by a lack of information.

## 3.2 Leading Tutorials

For many graduate students, teaching tutorials is often their first – and in some instances, only – chance to apply and develop their teaching skills. Running tutorials (also called “seminars”) can provide challenges for both TAs and faculty members. Numerous teaching aspects are involved in making tutorials productive learning events. Among the most important are: planning, communicating, delivery, question strategies, activities, and motivation. Below you will find useful strategies to help you deal with each one of these aspects.

### **Planning**

- **Tutorials should have their own learning goals.** Check that your goals are congruent with those of the course instructor and that they clearly define what students will do. Then communicate these goals to your students. Focus not on “covering material” but rather encourage active learning among your students.
- **Define guidelines and rules from the beginning.** Devote time early in the term to familiarizing students with essential guidelines for successful and productive learning. Tell them your guidelines, and ask for their input and opinions about them. You will also likely have a number of nonnegotiable rules (e.g., due dates), but be flexible

when possible (e.g., time for submitting assignments, locations for assignment submission, etc.). Provide students with an accurate copy of the goals and guidelines for your tutorial. Make sure that the penalties for infringement are clearly explained (i.e., how many marks will be lost).

- **Prepare a lesson plan for each session.** Begin with your learning objectives for the session as a way to help you limit your content to 2-3 main concepts for a 50-minute session. Make sure to include time estimates for each section of the tutorial.
- **Have your supporting materials ready.** If you plan to use visual aids (i.e., overheads, handouts), make sure they are legible and concise. If you plan to use the chalkboard, determine how to partition and use it. It's also a good idea to prepare a few extra problems, examples, or activities in case students want or need additional practice. If you need to demonstrate equipment use, practice before the tutorial.

### Communicating

- **Encourage students to participate.** Make sure you are not the only one talking in your classroom. Mention explicitly that you expect students to participate and that they should feel free to make comments and ask questions. Provide opportunities for participation (e.g., pause periodically and ask if there's something that students would like to say).
- **Comment on student performance and behaviours.** With large classes, tutorials may be the only time when students can get expert feedback on their work. Explain what's wrong, where and why. Put it in writing, if possible. Remember to commend good work too. The more your students get out of your tutorials, the better their attitude (and attendance) will be.
- **Make an effort to learn students' names and use them.** You could use name tents, ask students to say their name when asking questions, or return assignments to them personally. Students will regard the tutorial as more important if they feel that they are known to you, and that you will notice if they are absent.
- **Avoid excessive formality, but don't get too close.** Some tutorial leaders may feel insecure or nervous and behave in an overly strict or stand-offish manner. Assess your work climate by watching how your colleagues relate to students. Try to act naturally. If you are close to students in age, you may be tempted to socialize too much with them. Faculties have codes of conduct between staff and students. Remember that your job may require assessment. You need to ensure that students do not question your objectivity.
- **Do not ignore disruptive student behaviour.** Although dealing with it can be awkward, you need to resolve it as soon as possible because it can deprive other students of their right to learn. Ask the disruptive students if they have questions. Remind students of expected classroom behaviour stated on the first day of class. You may also need to speak to the student(s) involved outside of class.

## Delivery

- **Keep pace with lecture progress.** Tutorials normally follow up a lecture. Try to attend lectures yourself (seek lecturer's consent first). Alternatively, arrange for a pool of students to bring you a copy of their notes after the lectures, so that you have a better picture of what students have learned.
- **Make connections among parts of the course/tutorial.** Help students visualize the 'big picture' and integrate together the tutorial contents with the rest of their experiences in the course. Make statements like, "remember when we learned how to calculate  $x$  earlier in the term?" or "later on in the term, you will learn about..." You may also ask students to make such links.
- **Use relevant examples.** Illustrate points with examples taken from the field under study. When possible, share personal research or real-world experiences to help students visualize practical applications of concepts.
- **Use solid delivery skills.** Maintain eye contact during your tutorials so you can see raised hands and develop a rapport with your students. Speak loud enough and with enthusiasm to keep student attention. As well, move naturally around the room. Circulating the room while students are working allows them to ask questions easily.
- **Avoid speaking to your visuals.** Whether you use the blackboard or a screen (for overheads or electronic presentations), you may be tempted to look at and speak to your visuals. Remember to point your toes to the back of the room before you speak so that students can hear you and you can see their responses to your teaching.

## Questions

Please refer to the section on "Question Strategies" on page 17.

## Activities

- **Favour high-learning activities.** Taking notes, listening passively and pretending that they understand are behaviours that students should not be displaying during tutorials. Some subject-related tasks that can help students to learn-by-doing are: solving problems, discussing different perspectives, asking questions, answering questions, working out different approaches to problems or case studies, and engaging in debates.
- **Give clear instructions.** Before starting an activity, make sure that students understand what to do. Explain the goals and provide time breakdowns, then form groups if necessary. Write the instructions on the board, or consider providing printed instructions. When an activity is over, be sure to debrief to reinforce the goals and the "take home" message.
- **Avoid the temptation to turn tutorials into lectures.** It is all too easy for tutorials to degenerate into an extension of lectures, and for students to be as passive in

tutorials as they may be in lectures. You may decide to expand on lecture topics from time to time; however, if this becomes a trend in your tutorials, it may indicate that the learning goals are not being met during lectures. If you suspect this is the case, talk to the lecturer.

## Motivation

- **Students' attitudes toward tutorials may need changing.** Students often regard tutorials as optional and their attendance may be erratic. If it is possible to divert some of the syllabus coverage – and some of the associated assessment – into academic tutorial times, it is more likely that staff and students will take tutorials more seriously. Be sure that your tutorials add value to the course.
- **Never put students down.** Showing respect for all students is critical. Students can be highly sensitive to snubs or sarcasm, especially if they're feeling insecure. You need to act professionally at all times.
- **Acknowledge and thank participation.** Short phrases such as, "that's a good point," "thanks for saying that," or "I see what you're saying, but have you considered...?" allow students to develop insight instead of feel inadequate or foolish. Acknowledge all answers whether they are accurate or not. Students get disheartened if their response is passed over without comment because it is not what the tutor wants to hear – in ordinary conversation it would be considered extremely disrespectful to do this. However, be sure to provide or elicit an accurate response so the class has correct information.
- **Don't be afraid to commend good performance.** Receiving praise for doing something well is highly motivating. Sincere praise from a tutor for insight, achievement, participation, or helpfulness will make students feel good and more likely to participate again.

## Other Strategies

- **Save time by making time.** If you need to be available to students outside of class, set up office hours, post them on your office door and website, and be there! Office hours can minimize the interruptions to your research work that can occur when students do not know when best to approach you.
- **If you need help, ask somebody.** Your first resource should be the course instructor or coordinator. Whether a fellow TA or a faculty member, she/he will most likely have accumulated experience and insight to share with you as well as suggestions. In difficult cases, UW's [Conflict Resolution Support Program](#) may be the best source of help. Though the tutorials are your responsibility, you're part of a team that can help you.
- **Keep good records.** Make notes about attendance, topics covered, questions asked and student difficulties with the material. Such records will be very helpful if you're involved in running the same tutorial again and may provide useful feedback to the course instructor.



- **Solicit student feedback.** Ask how they are finding their learning experience and what they think you should stop, start, and continue doing. Check whether or not they have mastered concepts that have been covered already. Also, consider having an anonymous website where students can post opinions and suggestions for you.
- **Don't wait until after the midterm or end of the term to get feedback.** The instructor evaluation forms will not help you diagnose and address problem areas in real-time. You have to constantly monitor your tutorial. Evaluation data are also helpful for overall reflection on your teaching and they provide evidence of your teaching effectiveness.

### 3.3 Teaching Problem-Solving Skills



Many instructors in Engineering, Math and Science have students solve “problems.” But are their students solving true problems or mere exercises? The former stresses critical thinking and decision-making skills whereas the latter requires only the application of previously learned procedures. True problem solving is the process of applying a method – not known in advance – to a problem that is subject to a specific set of conditions and that the problem solver has not seen before, in order to obtain a satisfactory solution.

Below you will find some basic principles for teaching problem solving and one model to implement in your classroom teaching.

#### Principles for Teaching Problem Solving

- **Model a useful problem-solving method.** Problem solving can be difficult and sometimes tedious. Show students by your example how to be patient and persistent

and how to follow a structured method, such as Woods' model described here. Articulate your method as you use it so students see the connections.

- **Teach within a specific context.** Teach problem-solving skills in the context in which they will be used (e.g., mole fraction calculations in a chemistry course). Use real-life problems in explanations, examples, and exams. Do not teach problem solving as an independent, abstract skill.
- **Help students understand the problem.** In order to solve problems, students need to define the end goal. This step is crucial to successful learning of problem-solving skills. If you succeed at helping students answer the questions “what?” and “why?”, finding the answer to “how?” will be easier.
- **Take enough time.** When planning a lecture/tutorial, budget enough time for: understanding the problem and defining the goal, both individually and as a class; dealing with questions from you and your students; making, finding, and fixing mistakes; and solving entire problems in a single session.
- **Ask questions and make suggestions.** Ask students to predict “what would happen if...” or explain why something happened. This will help them to develop analytical and deductive thinking skills. Also, ask questions and make suggestions about strategies to encourage students to reflect on the problem-solving strategies that they use.
- **Link errors to misconceptions.** Use errors as evidence of misconceptions, not carelessness or random guessing. Make an effort to isolate the misconception and correct it, then teach students to do this by themselves. We can all learn from mistakes.

### Woods' Problem-Solving Model

#### 1. Define the problem

- **The system.** Have students identify the system under study (e.g., a metal bridge subject to certain forces) by interpreting the information provided in the problem statement. Drawing a diagram is a great way to do this.
- **Known(s) and concepts.** List what is known about the problem, and identify the knowledge needed to understand (and eventually) solve it.
- **Unknown(s).** Once you have a list of knowns, identifying the unknown(s) becomes simpler. One unknown is generally the answer to the problem, but there may be other unknowns. Be sure that students understand what they are expected to find.
- **Units and symbols.** One key aspect in problem solving is teaching students how to select, interpret, and use units and symbols. Emphasize the use of units whenever applicable. Develop a habit of using appropriate units and symbols yourself at all times.

- **Constraints.** All problems have some stated or implied constraints. Teach students to look for the words only, must, neglect, or assume to help identify the constraints.
- **Criteria for success.** Help students to consider from the beginning what a logical type of answer would be. What characteristics will it possess? For example, a quantitative problem will require an answer in some form of numerical units (e.g., \$/kg product, square cm, etc.) while an optimization problem requires an answer in the form of either a numerical maximum or minimum.

## 2. Think about it

- **“Let it simmer.”** Use this stage to ponder the problem. Ideally, students will develop a mental image of the problem at hand during this stage.
- **Identify specific pieces of knowledge.** Students need to determine by themselves the required background knowledge from illustrations, examples and problems covered in the course.
- **Collect information.** Encourage students to collect pertinent information such as conversion factors, constants, and tables needed to solve the problem.

## 3. Plan a solution

- **Consider possible strategies.** Often, the type of solution will be determined by the type of problem. Some common problem-solving strategies are: compute; simplify; use an equation; make a model, diagram, table, or chart; or work backwards.
- **Choose the best strategy.** Help students to choose the best strategy by reminding them again what they are required to find or calculate.

## 4. Carry out the plan

- **Be patient.** Most problems are not solved quickly or on the first attempt. In other cases, executing the solution may be the easiest step.
- **Be persistent.** If a plan does not work immediately, do not let students get discouraged. Encourage them to try a different strategy and keep trying.

## 5. Look back.

Encourage students to reflect. Once a solution has been reached, students should ask themselves the following questions:

- Does the answer make sense?
- Does it fit with the criteria established in step 1?
- Did I answer the question(s)?
- What did I learn by doing this?
- Could I have done the problem another way?

### 3.4 Holding Office Hours

Both faculty members and TAs can accomplish some of their most rewarding teaching in the office. Here are some general strategies on holding office hours from Barbara Gross Davis' *Tools for Teaching*.

#### Before the semester begins:

- ask about your department's policy on how much time should be devoted to office hours (usually two to four hours / week)
- plan to vary the times and days and be available by appointment
- list your office hours, office room number, telephone extension, e-mail address and fax number on the course syllabus and post them outside your office door
- consider if some office hours could be held online and if these would meet the needs of some of your students as well, or better than, face-to-face office hours

**On the first day of class**, mention your office hours and explain to your students that office hours give them the opportunity to talk to you informally, ask questions about assignments, review graded work, or get suggestions for further reading.

Often a teaching assistant may find that **students hesitate to make use of office hours**. How can you encourage students to drop by? Davis suggests:

- be friendly and accessible – stay after class
- invite students to come to your office hours several times throughout the term
- post answers to quizzes or homework by your office door
- return students' work with a "Please see me during office hours" notation

Some teaching assistants may find that **too many students come at once**. Here are some strategies you might try:

- advise students to prepare their questions and not ask for an explanation of an entire chapter or a recap of a class lecture they missed
- if several students express similar concerns or questions, group the students together
- devote particular office hours to reviewing certain difficult topics

Here are some **more general tips** for conducting office hours:

- use small talk when students arrive to help create a relaxed mood
- let the student tell you the purpose of the visit; if the student needs prompting, ask "What can I do for you?"
- give your students your undivided attention by putting aside your work and postponing lengthy conversations with others who phone or visit
- if students arrive five minutes before the end of your office hour, thank them for coming but add that you only have a few minutes right now. Encourage them to return near the beginning of your next office hour, or book an appointment at another mutually convenient time.

## 3.5 Question Strategies

Here are some general strategies for asking questions and responding to student questions in ways that will capture students' attention, foster student involvement, and facilitate a positive, active learning environment.

### **Start asking questions early in the course term and set the tone for an active learning environment**

Make it clear on the first day that you will be posing lots of questions and that you want the students to interact with you during a lecture. Let them know that you are interested in their ideas and that you encourage questions and comments throughout class.

### **Prepare your key questions and strategies for asking questions in advance**

Think about different questions that you can ask your students as well as different ways to ask them. The types of questions you ask should capture students' attention, arouse their curiosity, reinforce important material, and foster an active learning environment.

### **Wait for the answer**

Research shows that teachers wait on average about one to three seconds for a student response before answering the question themselves. Not only does this teach students that they don't need to respond, it also does not provide them with sufficient time to think about the question and formulate an answer. Although the silence seems awkward and uncomfortable, smile, wait patiently, scan the room, and endure at least a five to ten second wait between your question and student responses.

### **Ask only one question at a time and be sure it is clearly stated**

Teaching assistants often attempt to clarify a question by rephrasing it, and in the process, ask a different question. This practice leads to a lot of confusion amongst students as well as a decreased chance that they will respond.

### **Avoid leading questions**

Questions such as "Don't you all think that ...?" will not encourage students to offer their opinions and views on the subject. Students know what you think they should think.

### **Be cautious of asking, "Are there any questions?"**

Many education experts believe such questions to be somewhat "wasteful." Such inquiries are often viewed by students as a "ritualistic" exercise on the instructor's part and are usually met with silence. When asking the above, be sure that your question is genuine and has a clear purpose. If the question is met with no response, be prepared to use follow-up probing questions: "That means that if I were to ask you on an exam whether..., you would know how to answer?" This usually elicits questions and concerns from students.

### **Avoid yes/no questions and questions that require only a one-word response**

You cannot get a discussion going or foster an active learning environment by asking students questions that only require a one-word response. Ask a variety of questions that will require different thinking processes and deeper thought.

### **Be an active listener**

Avoid interrupting a student's answer, even if you think the student is heading toward an incorrect answer. Also, be sure to maintain eye contact and use non-verbal gestures such as smiling and head nodding to indicate your attention and interest in the student's response.

### **Acknowledge all student contributions**

Thank or praise the student for having asked a question or expressed a view with comments such as "Good question" and "Thank you for sharing that with us." Such comments reinforce the behaviour of asking questions and volunteering information during class. Be sure, however, that you vary your reactions to students to avoid overusing the same comments. You can vary your responses in the following ways:

- restate what the speaker has said to reinforce the point
- invite the student to elaborate: "Tell us more about that."
- ask for clarification: "What do you mean by that?"
- expand the student's contribution: "That's right, and to follow up on that point..."
- acknowledge the originality of the response: "That's a good point. I hadn't thought of that."

### **Repeat questions/comments and respond to the whole class**

Repeat student questions or comments when necessary so that the whole class can hear the information. You may need to paraphrase a long or complex question/comment. Also, when responding to student questions/comments, be sure to look around the room to include all students in your comments. A general rule of thumb is to respond by focusing 25 percent of your eye contact on the questioner and 75 percent on the rest of the class - this is the 25/75 rule.

### **Encourage student-to-student interaction**

Try to structure your comments to encourage students to interact with one another, "Mark, that's a good point. Could you relate that to what Sally said earlier?" Be prepared to facilitate recall of Sally's comment. When students are required to respond to one another, they become more attentive.

### **Admit when you don't know the answer**

You'll lose more credibility by trying to fake an answer than by stating that you don't know. If you don't know the answer to a student's question, say so, "That's a good question. I'm not sure about that." Then follow up in one of the following ways:

- ask the class if anyone knows the answer (be sure to verify any responses)
- suggest resources that would enable the student to find the answer
- volunteer to find the answer yourself and report back at the next class

### 3.6 Classroom Management



Here are some tips on how to set a positive classroom atmosphere and limit disruptions from the first day of class:

- **Signal the beginning of the class clearly and consistently.** To limit disruptions, you need to set the proper quiet atmosphere before you begin your class. In a clear, loud voice, say "Good morning!" or "We're going to start now!" and use the same cue throughout the term to gain students' attention. Do not start lecturing while students are talking.
- **Communicate your ground rules for the course on the first day.** Discuss your expectations for the students in the first lecture. Tell them your policies on classroom disruptions such as talking in class or arriving late. Provide a brief rationale for your rules, focusing more on students showing respect for other students.
- **Alternatively, spend the first class having the students collaboratively develop the ground rules for the course.** Encourage them to envision a classroom environment that will be most conducive to their learning. Ask them, too, to think through behaviours that might undermine their classmates' learning, and how those

behaviours should be addressed or managed by the instructor or by the rest of the class. Try to get them to see the ground rules as a social contract whose aim is to support their mutual learning.

- **Put the ground rules in your course outline.** Since the outline is a contract you make with the class, it is an appropriate place to put your expectations for the course. It also gives you an impartial document to return to should you need a way to reinforce your rules.
- **Give students a non-disruptive outlet for expressing their concerns.** Consider placing an "exit" box at the back of the room for students' questions, ideas, suggestions, and concerns, and respond to them on a regular basis. An anonymous online drop box or survey can be used in the same way to gather students' questions, ideas, suggestions, and concerns.
- **Consider giving a professionalism grade.** In smaller classes, it may be possible to grade students on their level of professionalism – are they on time, prepared for class, respectful of other students, etc.?

If students are disrupting your class, here are some possible ways to handle them:

- **Ask the students if they have a question.** Sometimes talking during class is legitimate; students have missed a key definition or number and need clarification from someone sitting nearby.
- **Move closer to the disruptive students.** Your proximity may signal to them that they are interrupting the class.
- **Make a general statement to the class about the disruption.** If you do not feel comfortable singling people out, you can indicate to the class in general that the disruption level is too high and remind them of the ground rules you set on day one.
- **Use an active learning activity.** Try a think-pair-share where you have students turn to the person next to them to discuss a problem or question. This will break up the flow of the class and help to re-capture students' attention. It will also give you an opportunity to approach the disruptive students and discuss your concern with them.
- **Ask those who consistently disrupt the class to see you after class.** This will give you an opportunity to air your concerns outside of class and indicate your displeasure with the students' behaviour without embarrassing them in front of the class.
- **Ask the disruptive students to leave.** If you feel there is no other recourse, you are within your rights to ask students to leave the room. You may also choose to leave.
- **Designate a specific part of the classroom for laptop users.** Many students prefer to take class notes using a laptop, but the keyboard tapping can distract other students. Creating a "laptop zone" at the back of the classroom and a "non-laptop zone" at the front can help allay this problem.

Other general tips to help large classes run smoothly include:



- **Start and end classes on time.** This helps to create an atmosphere of respect for students' time and yours.
- **Avoid giving cues that class is ending.** If you say "One more point and then we can go," it is likely that students will start packing their bags before you are finished. Moreover, to help prevent students from packing up and leaving early, make it a habit to spend the last two or three minutes of the class re-iterating the three most important points or ideas of that day's class.
- **Move around the classroom.** Try to keep students involved and attentive by moving throughout the classroom.
- **Look and sound confident.** Arrive at class prepared and handle yourself professionally at all times to indicate that you are in charge.
- **Make sure everyone can hear.** Learn to project your voice effectively, encourage students to speak up loudly, and if necessary repeat student questions and responses for those who may not have heard.
- **Admit when you can't answer a question, offer to find the answer, and then report back next class.** Avoid getting bogged down in material about which you are unsure.

### 3.7 Controlling Nervousness

All living creatures have the instinct for survival and when confronted with a perceived danger react in what is called a fight or flight response – i.e., they either defend themselves or run away. In nature, these responses can serve animals well in their struggle for survival. Unfortunately, such responses are misplaced for instructors who are faced with a roomful of students or colleagues. Your body's reaction to fear is natural. Even seasoned presenters, performers, and politicians still experience fear in some form, but they have learned how to channel it into energy. The goal is to learn how to control fear, not eliminate it.

#### Physiology of fear

To learn how to control your fear, you need to understand your body's natural response to fear. The body prepares itself for the challenges of dealing with danger by entering a state of high physiological arousal through the release of a hormone called adrenaline. Most familiar feelings of fear are caused by adrenaline and include the following:

- **increased heart rate and breathing:** this increase allows for more rapid exchange of oxygen in certain areas of the body, particularly in large muscle groups and major organs.
- **butterflies:** blood flow is diverted away from the digestive system, leaving your stomach slightly deprived of oxygen and resulting in a fluttery feeling.

- **upset stomach:** blood flow is diverted away from the digestive system, and the elimination of wastes lightens the body and prepares it for faster flight from danger.
- **dizziness:** this occurs because increased oxygen in the system increases respiration.
- **dry mouth:** increased breathing and sweating leads to dehydration.
- **sweating:** increased blood flow to large muscle groups creates heat in your body causing you to sweat.
- **tremors and shakes:** blood flow is diverted away from fine motor muscles to large muscles and major organs, leaving fine motor muscles deprived of oxygen and harder to control.
- **dilated pupils:** increased blood flow to ocular centres results in larger pupils, allowing for more light to enter the eye to aid in perception of foes.
- **slurred speech:** blood flow is diverted from brain areas associated with secondary functions such as speech.

### Controlling fear of public speaking

You can't control the amount of adrenaline that your body releases in response to fear, but you can control its effects and reduce the amount of fear that you feel:

- **Prepare well, especially your introduction.** By the time your introduction is over, you will have started to relax.
- **Remember that most presentations are not performances.** They are a sharing of information.
- **Know your audience.** Before preparing your presentation, know who you will be presenting to and what their needs and expectations will be for your presentation.
- **Rationalize your fears.** If you're very nervous, list each fear and consider whether it is reasonable or what you could do to overcome it.
- **Use relaxation exercises.** Stretching, deep breathing, etc. can help you slow your heart rate.
- **Try positive self-suggestion.** Visualize yourself presenting successfully.
- **Practice your presentation.** Present in front of a mirror or with a small group of friends or family.
- **Remember to breathe and drink lots of water.** Increased breathing and sweating will dehydrate you quickly.

- **Know your facilities.** Test all of your equipment in advance and know what your presentation room looks like. This will help you visualize your presentation and alleviate unnecessary worries about equipment failure.
- **Have a backup plan.** Know what you will do if the projector doesn't work. Be prepared to present without your visual aids and have chalk or markers available and a plan for using them if you can't use the visuals you prepared.
- **Arrive early.** This is a great opportunity to get to know your audience as they filter into the room.
- **Introduce your topic with a personal story.** Telling a story helps the audience identify with you and makes the atmosphere warmer and more personable. You may consider using a humorous story if it fits with your topic. Laughing with your audience will relax both them and you.
- **Focus on your audience and your topic, not yourself.** Avoid overanalyzing your delivery while doing it.
- **Remember that your audience wants you to succeed.** Audience members get uncomfortable when a presenter struggles. They want you to do well.
- **Ignore mistakes, and don't apologize.** Often only you know what went wrong.
- **Remember that most of your fear symptoms don't show.** Audience members can't see the butterflies in your stomach or the sweat on your palms. Try being video-taped so you can see for yourself.
- **Use your nervous energy to generate enthusiasm.** Monotonous speakers are not engaging. Your nerves (adrenaline) can give you the rush of energy you need.

Presenting gets easier the more you do it. So challenge yourself. The reward of seeing the look of comprehension or awareness in a student's or colleague's face makes it more than worthwhile.

### 3.8 Teaching with Technology

In addition to the tools that are found in LEARN (Waterloo's learning management system), there are many other technologies that you might find pedagogically useful, such as Clickers, ePortfolios, Presentation Tools, Concept Mapping Tools, Screencasting Tools, Crowd-Sourcing Tools, Wikis, and Outliners. Waterloo's Centre for Teaching Excellence (CTE) has developed best [practices for all of these technologies](#).

If do you use online technologies in your teaching, or if you ask your students to use them, you should first read the [Guidelines for Cloud-Based Tools](#) that was jointly developed by the CTE, the Centre for Extended Learning (CEL), and ITMS.

Learning technologies are evolving all the time, but you can stay up to date by subscribing to CTE's listserv. The listserv sends out an email every two weeks with a handful of items pertaining to new educational technologies. If you'd like to be added, just send an email to [Dr. Mark Morton](#). Additionally, you can stay current with new educational technologies via CTE's [Facebook Page](#).

If you have questions about learning technologies, you can email [Dr. Mark Morton](#). Questions about LEARN should be directed to [Jane Holbrook](#).

## 4. Grading and Feedback

### 4.1 Fast and Equitable Grading

Whether you're grading assignments, essays, lab reports, or exams, there are some general strategies that can help you save time and ensure that you're being equitable.

#### For Fast Grading

- Prepare an answer key or set detailed marking criteria before you start grading. This helps you avoid being “bluffed” by highly literate or clever students who respond elaborately to only one aspect of a question or an aspect tangential to the question and impress you more with their writing or creative problem-solving style than the content of their answer.
- Annotate your grading criteria as you progress through the marking. This helps you become more efficient as you encounter the same mistakes repeatedly; you have a record of how you handled the same error previously.
- With problem-solution questions, work through the problem yourself just before starting to grade it, even if you've done it several times before. This helps you easily remember the details.
- Grade only one question or topic at a time so you can stay focused. And finish grading all responses to one question at one sitting if possible so you don't have to worry about reformulating or remembering the subtleties of your marking scheme. But know your own limits since fatigue may keep you from grading reliably throughout.
- Identify assignments or exams that use the same approach and group them together. After the divisions are made, go back and grade the work, starting with the best group and finishing with the worst. This allows you to become familiar with some mistakes before marking the more difficult responses.
- Find excellent, good, adequate, and poor examples to serve as anchors or standards. Use them to refresh your memory of your grading standards and help ensure fairness.
- Avoid over-marking. Write brief comments on students' work. Do not feel that you must correct every grammatical or mathematical error, respond to every idea, or propose alternatives for each section. It is best to focus on only one or two major problems and look for patterns of errors rather than note every flaw.
- Respond to students' work as an interested reader or reviewer would. Set yourself three goals: highlighting what was done well (to build confidence), pointing out key errors and weaknesses that need correction, and providing ways to improve.

- Avoid rewriting students' assignments. Indicate the major problems with a segment of the assignment and perhaps rewrite one paragraph as an example, but leave the major revisions to students.
- Set limits on how long you will spend on each exam question, essay, or assignment.
- Sort students' work into A, B, C, D, and Fail piles before assigning final grades to help you decide on borderline cases.

### **For Equitable Grading**

- Cover students' names so you're not influenced by the performance of students on previous exams or assignments, their class participation level, or their attitudes about you or the course. You can ask students to put their names on the last page or the back of an exam or assignment.
- Determine the general level of performance before grading by randomly sampling the assignments or exams or, if possible, skimming them all.
- Avoid trying to mark entire exams or all essays in one sitting since you may become too tired to grade reliably. But marking all responses to one exam or assignment question in one sitting can help ensure fairness. Know your own limitations and what will work best for you.
- When there's more than one marker for a course, have a group marking session in which everyone grades a few papers or exam answers and compares them. Or you can split up the marking task and have each marker grade the same question or set of questions on every exam.
- After marking one question on all exams or assignments, shuffle the papers to remove any expectations based on order.
- Avoid judging students' work on extraneous factors such as handwriting or use of pen versus pencil.
- Place marks on the last page of students' work to help protect privacy.
- Record all grades as number grades (versus letter grades) when possible to ensure greater accuracy when calculating final marks.

### **For grading difficulties, cheating, and plagiarism**

If you are a teaching assistant, discuss any grading issues with the course instructor, particularly if you suspect issues of cheating or plagiarism. If you are the teaching assistant and you suspect cheating or plagiarism, contact the Associate Dean of Undergraduate Studies for your Faculty for advice on how to proceed. University [Policy #71](#) deals with student academic discipline.

You can also help students avoid unintentional plagiarism by clearly explaining at the beginning of term what it encompasses.

## 4.2 Receiving and Giving Effective Feedback

We are continually receiving and giving feedback. Whether explicit through oral or written language, or implicit in gestures or tone of voice, feedback conveys information about behaviours and offers an evaluation of the quality of those behaviours. While it is easy to take feedback personally, strive to perceive it as a learning opportunity. Feedback can reinforce existing strengths, keep goal-directed behaviour on course, clarify the effects of behaviour, and increase recipients' abilities to detect and remedy errors on their own. Use the tips below to receive and give feedback effectively.

### Receiving Feedback Effectively

- **Listen to the feedback given.** This means not interrupting. Hear the person out, and listen to what they are really saying, not what you assume they will say. You can absorb more information if you are concentrating on listening and understanding rather than being defensive and focusing on your response.
- **Be aware of your responses.** Your body language and tone of voice often speak louder than words. Try to avoid putting up barriers. If you look distracted and bored, that sends a negative message as well. Attentiveness, on the other hand, indicates that you value what someone has to say and puts both of you at ease.
- **Be open.** This means being receptive to new ideas and different opinions. Often, there is more than one way of doing something and others may have a completely different viewpoint on a given topic. You may learn something worthwhile.
- **Understand the message.** Make sure you understand what is being said to you, especially before responding to the feedback. Ask questions for clarification if necessary. Listen actively by repeating key points so that you know you have interpreted the feedback correctly. In a group environment, ask for others' feedback before responding. As well, when possible, be explicit as to what kind of feedback you are seeking beforehand so you are not taken by surprise.
- **Reflect and decide what to do.** Assess the value of the feedback, the consequences of using it or ignoring it, and then decide what to do because of it. Your response is your choice. If you disagree with the feedback, consider asking for a second opinion from someone else.
- **Follow up.** There are many ways to follow up on feedback. Sometimes, your follow-up will simply involve implementing the suggestions given to you. In other situations, you might want to set up another meeting to discuss the feedback or to re-submit the revised work.

## Giving Effective Feedback

Prioritize your ideas. Limit your feedback to the most important issues. Consider the feedback's potential value to the receiver and how you would respond – could you act on the feedback? As well, too much feedback provided at a single time can be overwhelming to the recipient.

- **Concentrate on the behaviour, not the person.** One strategy is to open by stating the behaviour in question, then describing how you feel about it, and ending with what you want. This model enables you to avoid sounding accusatory by using "I" and focusing on behaviours, instead of assumed interpretations. Example: "I haven't seen you in class in for a week. I'm worried that you are missing important information. Can we meet soon to discuss it?"  
Instead of: "You obviously don't care about this course!"
- **Balance the content.** Use the "sandwich approach." Begin by providing comments on specific strengths. This provides reinforcement and identifies the things the recipient should keep doing. Then identify specific areas of improvement and ways to make changes. Conclude with a positive comment. This model helps to bolster confidence and keep the weak areas in perspective. Example: "Your presentation was great. You made good eye contact, and were well prepared. You were a little hard to hear at the back of the room, but with some practice you can overcome this. Keep up the good work!" Instead of: "You didn't speak loudly enough. However, the presentation went well."
- **Be specific.** Avoid general comments that may be of limited use to the receiver. Try to include examples to illustrate your statement. As well, offering alternatives rather than just giving advice allows the receiver to decide what to do with your feedback.
- **Be realistic.** Feedback should focus on what can be changed. It is useless and frustrating for recipients to get comments on something over which they have no control. Also, remember to avoid using the words "always" and "never." People's behaviour is rarely that consistent.
- **Own the feedback.** When offering evaluative comments, use the pronoun "I" rather than "they" or "one," which would imply that your opinion is universally agreed on. Remember that feedback is merely your opinion.
- **Be timely.** Seek an appropriate time to communicate your feedback. Being prompt is key since feedback loses its impact if delayed too long. Delayed feedback can also cause feelings of guilt and resentment in the recipient if the opportunity for improvement has passed. As well, if your feedback is primarily negative, take time to prepare what you will say or write.
- **Offer continuing support.** Feedback should be a continuous process, not a one-time event. After offering feedback, make a conscious effort to follow up. Let recipients know you are available if they have questions, and, if appropriate, ask for another opportunity to provide more feedback in the future.



### 4.3 Encouraging Academic Integrity

In any given situation, it is up to the individual whether he or she chooses to cheat or to behave honestly. Notwithstanding that, circumstances matter, and good people under certain circumstances will choose what they perceive as the easier alternative. What can you do as a TA to encourage your students to do honest work? There are many reasons cited by students when they are asked why they cheated, plagiarized or collaborated dishonestly. Some of the most common reasons can be instructive regarding what teaching assistants can do to discourage dishonest behaviour and encourage academic integrity in their courses.

#### **I don't feel any sort of personal connection with my professor/TA.**

Class sizes are increasing, which makes it harder to get to know our students. The more we can try to connect in a meaningful way with our students, the less likely they are to cheat.

- Tell them a little about yourself, and how you came to be a graduate student.
- Make a serious effort to learn the names of at least some of your students.
- Let them know that you are an honest person and that you value that trait in others.
- Explain why practicing the principles of academic integrity is important in your field/profession, and what the consequences are if these principles are not followed.
- Let them know that you are all on the same side as far as the ultimate goal – learning – is concerned, rather than establishing a “me against them” mentality.
- Establish an environment that is conducive to their coming to see you (rather than resorting to cheating or plagiarizing) if they have a problem with getting a paper or an assignment done on time.

#### **My professor just tells off students who cheat and makes them resubmit the assignment, so what's there to lose? It's definitely worth the risk to cheat.**

Students get to know the professors and the teaching assistants who turn a blind eye to cheating and plagiarism, and interpret this as implicit support for dishonest behaviour.

- Discuss in your tutorial the issue of academic integrity as well as your and the University's policies regarding academic offences and the penalties involved.
- Make absolutely explicit your expectations regarding collaboration (and outside help such as tutors) on assignments and/or papers at the beginning of each course, and repeat this information often during the term.

**It's impossible NOT to see the test paper of the person sitting beside me during exams.**

- Provide sufficient space between people taking a test.
- Proctor tests conscientiously. Avoid merely sitting or reading passively at a desk at the front of the class – circulate in the room and monitor students' behaviour carefully.

**How could I possibly have time to do a weekly assignment in each of the five courses I'm taking? My instructor seems to have no idea that I'm taking other courses!**

- Be reasonable in your expectations of students. They are (usually) taking other courses and have responsibilities beyond their school work. Students should spend 8-10 hours per week on each course, and this includes in-class time.
- Be available to students for help, particularly at crucial 'crunch' times before assignment due dates and test dates.

**I thought that the material I found on the web didn't need to be referenced because it is in the public domain, not actually in a book.**

- Let your students know that ALL ideas and information that they incorporate into their work should be referenced, even something that someone told them about (referenced as a "personal communication" from that person).
- Warn them that some material on the web might not be as accurate or reliable as that found in books and scholarly journals because much of it has not been subjected to peer review.
- Teach them proper citation practice for information from all sources, including web sources. Your liaison librarian can help with this if you are unsure about it yourself.

## 5. Being a TA in Online Courses

Many of the same principles of effective teaching in a traditional university classroom that were introduced in earlier sections of the manual also apply to online teaching. One of the obvious differences between online and traditional teaching is the lack of a physical classroom. At the University of Waterloo, a virtual classroom site is created for all fully online courses in our learning management system, [LEARN](#). Students may work with the course content, communicate with each other and the instructor, submit assignments and take quizzes all through this online space.

Being a teaching assistant for a fully online course may be challenging at first because you may never meet students face to face. Communication is often asynchronous and text-based so you do not have an opportunity to read facial expression or body language. Are the students working through the material? Are they having problems? You may feel that the lack of a physical connection with the students at a pre-determined time and place each week may prevent you from answering these questions. Rest assured that these challenges can be addressed. Many uWaterloo instructors and teaching assistants find that teaching online is a highly rewarding experience and they can even feel more connected to their students than in a physical environment.

### Online Students

It is important to note that online students are not necessarily students that are studying from a distance. Seventy-five percent of students enrolled in online courses at the University of Waterloo are full time or part time on-campus students working towards their undergraduate degree. Many teaching assistants find it helpful to enroll in an online course themselves in order to experience firsthand online learning from the student perspective.

### Course Development

Online courses developed at the University of Waterloo are specifically designed to take advantage of the opportunities afforded by online learning such as:

- Accommodating students that may have on campus scheduling conflicts, that live outside the Waterloo area or that are on co-op work terms
- Providing students with the ability to review content again and again to reinforce key concepts
- Allowing student to learn at their own pace

At the University of Waterloo, course authors work with the Centre for Extended Learning for approximately 8 months to create a fully online course. Online courses are designed to meet the [University of Waterloo's quality guidelines](#).

## **Role of the Online TA**

As a teaching assistant you may be asked to mark, grade, discuss or add content to an online course. This can be challenging if you are not familiar with LEARN. [On campus training courses](#) and [help documentation](#) is available to assist you. The [Centre for Extended Learning](#) also offers an Online Teaching Assistant training course.

The instructor may ask you to do any of the following as a teaching assistant for a fully online course:

- Moderate online discussions
- Post news items
- Manage student submissions in dropboxes
- Mark student dropbox submissions, grade them and post grades to the course's online gradebook in LEARN
- Email announcements or reminders to students
- Create online student learning groups
- Host TA office hours online
- Edit or create content in LEARN
- Moderate an online synchronous session using Adobe Connect
- Use external online tools (e.g., Skype) for instructional purposes
- Assist students with minor technical difficulties in LEARN

Meet with your online instructor early on to ensure you have TA access to the course in LEARN, that you know what is expected of you and that you are comfortable with the corresponding LEARN tools.

### **Teaching Tips for Online TAs:**

Set aside time every day or every other day to log into the course site to check student activity. Familiarize yourself with the course schedule so you know what students should be doing each week. Advise students to set aside at least 10 hours per week to work on their online course. Students who schedule regular times each week to work on their online course are less likely to get behind.

The "Ask the Instructor or TA" discussion board is set up in most online uWaterloo courses. Post a friendly welcome and introductory biography of yourself using this discussion board within the first day or two of term. Let students know how they can contact you and when they can expect a response from you.

Being "present" in online courses is critical. Make every effort to reply to email questions or discussion posts to "Ask the Instructor or TA" within 24-48 hours from Monday to Friday as a minimum. If you will be away for an extended period of time, let the instructor and students know this ahead of time.

When students require technical assistance with LEARN, direct them first to the "Help" link located in the LEARN environment. If students continue to have technical problems with

LEARN, they should be directed to CEL's technical support at [extendedlearning.help@uwaterloo.ca](mailto:extendedlearning.help@uwaterloo.ca).

Provide prompt and effective feedback to students within LEARN. Let students know how and when they can access your feedback in LEARN before assignment due dates.

With the instructor's permission, use the News section of the Course Home page to make announcements during the term to communicate new or changing information regarding due dates, absences, tips etc. as needed.

Know when to refer students elsewhere. If students have administrative questions, they should be directed to the CEL office at [extendedlearning@uwaterloo.ca](mailto:extendedlearning@uwaterloo.ca). If students have questions relating to academic issues (e.g., course content, deadlines, etc.) they should post on the "Ask the Instructor" discussion topic. This allows other students to benefit from questions and posted answers as well.

Discussion boards and other online communication tools promote interaction and learning. Use them effectively by:

- Helping students to make connections between discussion postings and the course content.
- Ask challenging questions that connect course content to the discussions. Ask for clarification. Probe assumptions. Ask for examples and alternatives.
- Responding to postings that seem to be left behind, that have not received responses in an effort to move conversations in new directions.
- Modeling appropriate, positive, and useful posting practices: "I understand what you are saying and I agree with your point, but I wonder..." or "Help me to understand your last sentence, it is a bit confusing to me"

Spend some time familiarizing yourself with LEARN. The Basic Introduction to LEARN course runs at the beginning of each term. Access the [help documentation](#) provided for TAs.

Keep in mind that because courses are designed before the start of term, all content, including assignment information, lectures and discussion boards are developed and set up in LEARN in advance. As a TA, you should familiarize yourself with the course site and its content at the start of term.

## 6. Teaching Tips for International TAs

There are many challenges to being a teaching assistant. It can be a steep learning curve for anyone, especially if you are an international student who has the added challenge of learning the nuances of a culture that may be very different from your own. If you are an international teaching assistant (ITA), the following information can help you to make the transition to a Canadian university classroom smoother and avoid common misunderstandings.

### **Differing Backgrounds**

The depth and breadth of the material covered at both the secondary (high school) and post-secondary (university and college) levels differs dramatically among different countries. Therefore, you should not expect your students to know all of the same aspects of a subject that you may have been taught in your country, especially if you are teaching a first-year course. Be patient and willing to slow down your teaching of the material and to address questions.

### **Students' Level of Interest**

Some students might seem to show little interest in your course. Avoid taking this personally. For many Canadian students, the university experience is about the social aspects as much as it is academic ones. Also, some students may not have settled into their specialty or even decided if university is where they want to be, especially if they are in their first few years. Members of your class may be taking survey courses to try out a topic area or because it is required, rather than because it is something in which they are keenly interested. Try not to become discouraged by what seems like student apathy. Show interest in your material and try to engage the students. The more enthusiasm you show for the course, the more likely it is that your students will see the value in it.

### **Informality in the Classroom**

The Canadian university dynamic can seem very relaxed to ITAs whose experience of school is much more formal. For example, students in Canada do not stand when the teacher enters the room. Also, many students will eat or drink in class, and might arrive late or leave early. Many students are accustomed to calling TAs by their first names. If you are not used to this kind of classroom behaviour you might feel shocked or even angered by the attitudes and actions of the students.

It's important to understand that in Canada informal attitudes from students are often a sign of approval and acceptance or respect. As well, students appreciate friendliness and openness from authority figures. TAs should maintain a professional distance from their students at all times; however, students will respond well to a TA who is willing to share personal experiences, laugh occasionally, and talk with his or her students outside of class. This kind of informal relationship signals to students that you care and are interested in them and their education.

## Teaching Approaches

Students expect that their instructors, including their TAs, will be knowledgeable about the course material and will present the material in a clear, easy to understand, systematic way. Canadian students generally have the impression that the teacher's role is to give them detailed instructions and feedback on assignments and to explain step-by-step what they are expected to do. Sometimes this teaching style is referred to as "spoon-feeding", but it is better understood as a very involved level of interactivity between students and teachers and is a teaching style that most first- and second-year students expect; part of the university experience is to move students gradually toward a more independent learning style so that they can interpret assignments accurately and engage in self- and peer-assessment as they mature as learners.

Here are some pointers to make your teaching more effective in this environment:

- Be clear about assignment expectations and due dates, and be prepared to answer students' questions.
- Be enthusiastic about the TA experience and engage in it fully. Canadian students have been raised in a system that supports interactive teaching methods and aggressive questioning of the teacher. Some ITAs find these approaches disrespectful or intimidating, but it can be an excellent opportunity to expand your teaching experiences and gain insight into how North Americans interact. A positive attitude will go a long way in a Canadian classroom.
- Communicate honestly and encourage students to express their needs or misunderstandings. Students in North America will be understanding and supportive of an instructor who is willing to admit if he or she doesn't know something. If you have a student ask you a question that you can't answer, simply say you don't know the answer but will find it out for the next class (and then make sure you follow up on it). Make it clear to your students on the first day that they are free to ask questions at any time and encourage them to talk to you about any of the course material or requirements.
- North American students appreciate a certain level of entertainment and engagement in a classroom. What that means is that they prefer variety over having someone deliver information in a dry lecture format every class. Also, students are more attentive if they are able to participate in class. Engage your students through activities such as debates, role playing or group work. There are a number of CTE Teaching Tips with ideas on how to vary your lectures or tutorials. See, for example, Key Strategies for Effective Tutorials, Active Learning Activities, Teaching Problem-Solving Skills, and Implementing Group Work in the Classroom.
- In some parts of the world, negative or direct criticism is seen as an effective teaching tool; however, in North America negative feedback can be very hard on a student's morale. When addressing students' responses or comments, be encouraging and recognize their effort to contribute. Students expect praise when they do well and encouragement when they are incorrect. As an example, if a student offers a wrong answer, you can respond by saying, "You have the right idea, but there's more to it than that" rather than simply stating, "No, that's wrong."

## Language Issues

Being a TA is a great opportunity to improve your English if it is not your native language. Teaching in English can be a major challenge when you first start, but your position as a non-native speaker in front of the class can work to everyone's advantage. It is good for students to learn to understand English with other accents, and if you are able to relax and enjoy the situation, you may be able to use the 'language barrier' to connect with your students.

Whether inside or outside of the classroom, make every effort to practise and improve your English. There is a difference for students between adjusting to an accent and simply not being able to understand a teacher because he or she does not have adequate language skills. There are a number of ways to strengthen your English: the university offers labs, courses, tutorials, mentor programs and other forms of support (e.g. the English Language Institute at [Renison University College](#) offers non-credit courses in English, English for Academic Success Program and several intensive short-term programs for students to improve their English. You can also engage in conversation with native speakers in your department, your classes, or even where you live. You can surround yourself with colloquial English by having the television on or listening to a Canadian talk radio station, for example, the CBC.

If you believe your English skills might be an issue while you are a TA, acknowledge the language issue on the first day of class. When you are introducing yourself, state that you are still learning English, and let the students know that they can ask you to repeat yourself if anything is unclear. Students will be much more open and supportive if they know you recognize that your English is not perfect and that you are sincere in your efforts to be understood. Also tell the students that you might need them to speak more slowly or clearly than they are used to in order to help you understand them. Students appreciate and engage easily in this kind of cooperative teacher/student dynamic; it is not seen as diminishing your position of authority to be honest in this manner.

Here are some suggestions to further help with language issues:

- Constantly check student understanding. Some ITAs speak very quickly, so when you make a major point, ask your students if they've understood you. If they haven't, repeat your point more slowly and clearly, phrase it in a different way, offer an example and/or write it on the blackboard or an overhead transparency.
- Before answering a question from a student, restate his or her question and then ask if that's what the student meant. For example, you could say, "What you're asking is ... is that correct?" That way you confirm that you have understood the question and you have made sure that the entire class has heard it.
- Make an outline of the main points to be covered in class. You can put the outline on the board at the beginning of class, briefly reading through it at first and referring to it as you move from one point to the next. This will help students keep track of where you are in the lesson and more easily follow your ideas even if they are struggling with your pronunciation or accent.



- If you present a technical term or theoretical concept that is new to the students, write it on the board, on an overhead, or have it in your PowerPoint presentation. If you are unsure how to pronounce something, ask a colleague in your department before class, or write it out for your students and ask them how it is pronounced.

If you find that you are feeling overwhelmed by your TA responsibilities, discuss your struggles with your supervisor. It is also useful to talk with other TAs in your department or someone who has previously been a TA. There is also support available from Centre for Teaching Excellence. Read through some of the Tips sheets or set up an appointment to have a TA Developer observe one of your classes and give you feedback and suggestions on how to improve.

The Canadian classroom can be a space of powerful learning for you as well as your students, once you understand the dynamics. Try out some or all of these tips and see what works for you. Above all, remember to relax and enjoy the experience.

## 7. Evaluating and Improving Your Teaching

Feedback is critical to teaching assistants as it provides them with information on what is working in their teaching and what can be improved. This feedback typically comes from two sources: students and faculty members who work with TAs. Below you will find information on how to analyze end-of-term (summative) feedback and how to collect mid-term (formative) feedback on your teaching. Keep in mind that not all departments at Waterloo have formal TA evaluations which might make it difficult for you to receive feedback on your teaching. However, even if your department does not conduct TA evaluations, you can still use mid-term feedback introduced in this section to collect feedback on your teaching in order to become more aware of your teaching strengths and areas for improvement.

### 7.1 Analyzing Student Evaluations

End-of-term TA evaluations conducted by students and/or course instructors provide valuable feedback to TAs on what is working well in their teaching approach and what areas of their teaching could be improved. These questions are intended to help TAs to analyze the data received through course evaluations of their teaching.

1. When you review the evaluation data (quantitative and qualitative), what are your first impressions? What stands out for you?
2. Identify key strengths.
  - a. List the questions that received the top 3 quantitative scores (use mean scores if available).
  - b. Read students' responses to any open-ended questions that discuss strengths, and list the comments mentioned frequently (e.g., "really cares about students," "tests are fair"). Then read the comments again, tallying the number of students who mention each item on your list. Rank the items, with the highest number being first, then focus on the top 3-5 items.

If you have a manageable number of forms, you may choose instead to enter all comments into a word processing file, and organize them according to themes that arise (e.g., attitude toward students, preparation, organization), then you can tally the responses that you listed under each theme to discover which ones were discussed most often and create your rankings from those numbers.

3. Identify key areas to improve.
  - a. List the questions that received the lowest 3 quantitative scores (use mean scores if available).

- b. Repeat the instructions for question 2b, except read the responses to the open-ended questions about areas to improve/changes to make.
4. Analyze and reflect.
    - a. How do you account for your key strengths and the areas that need improvement? What is it about your course and/or your teaching that helps to explain further your results? What specific strategies, behaviours, and/or attitudes that you feel led to the results of your evaluations?
    - b. What strategies, behaviours, and/or attitudes will you definitely try to maintain in future courses?
    - c. What will you try to change the next time you teach and how will you make the change(s)?

## 7.2 Using Mid-term Feedback

TAs who are interested in becoming more self-aware as teachers may choose to request student feedback during the course. This is known as a mid-term student feedback. With this feedback, TA poses a small number of specific questions to the students in the first half of a term (4-5 weeks into the course). Unlike end-of-term TA evaluations, this type of feedback allows TAs to make useful changes to their teaching approaches before the course is over and the end-of-term evaluations are in. Mid-term feedback from students can provide TAs with insights into the student experiences with the course during the course of the semester. Mid-term student feedback can also help to improve end-of-term evaluations as teaching issues are addressed within the term.

### Collecting Feedback

- **Ask the students to reply anonymously to a few questions.** You can ask what is going well in the course and what needs improvement. Or you could ask what to start, stop, and continue in the course (this is known as a Start-Stop-Continue technique). Ask for specific comments so you can interpret the ideas accurately. Leave the room while the students write their comments and have a student collect the responses and return them to you. You could also devise a questionnaire for them to complete.
- **Use a suggestion box.** Place a large envelope on your office door and encourage students to drop off questions, comments, or problems. You can bring a box to each class, too, if you wish.
- **Do your own analysis.** You can be collecting your own mid-term feedback by writing your own reflections on your lecture notes after each class, keeping a teaching journal, or completing checklists. One tip here is to make sure you record concepts that caused students difficulty or really insightful student questions so that you can alter your future lecture to deal with those areas.

## Responding to Students' Feedback

- **Respond to feedback as soon as possible.** Collect feedback when you are in a position to immediately review the comments. Respond to feedback received by other means, such as e-mail, as appropriate. Clarify any misunderstandings about your goals and their expectations. Tell them what suggestions you will act on this term and those that you will not act on and why.
- **Consider carefully what students say.** Review the positive comments about the course first, since it may be easy to be discouraged by negative comments. Then consider the suggestions for improvement and group them into three categories:
  - Those you can change this semester (e.g., turnaround time on homework)
  - Those that you cannot change (e.g., the number of quizzes or tests)
- **Thank them for their comments.** Students appreciate knowing that you care about what they say.

## 7.3 Professional Development for TAs

Some departments on our campus offer training sessions for new TAs at the beginning of the term, usually in the fall. In addition to the faculty-wide or departmental teaching supports that might be available to you, the Centre for Teaching Excellence (CTE) offers various programs to assist in your development as a teacher. Every term CTE provides workshops, practice teaching sessions followed by peer feedback (known as microteaching), classroom observations and other sessions that help prepare graduate students for their teaching roles.

Graduate students can attend some of the CTE workshops or choose to participate in one of the teaching certificate programs such as Fundamentals of University Teaching (open to all graduate students) and Certificate in University Teaching (open to doctoral candidates planning to pursue faculty positions).

Graduate students who have taken full advantage of these opportunities have subsequently reported that they had more confidence in their role as TAs and instructors and felt better prepared for university teaching.

More information about teaching development programs available to graduate students through CTE is available on the [CTE website](#):

## 8. University Offices of Interest to TAs

[Centre for Teaching Excellence \(CTE\)](#)

[English Language Institute](#)

[The Conflict Management & Human Rights Office \(CMAHRO\)](#)

[Organizational and Human Development \(OHD\)](#)

[Centre for Extended Learning \(CEL\)](#)

[Counseling Services](#)

[Office for Persons with Disabilities](#)

[Writing Centre](#)

[Office of Academic Integrity:](#)

[Waterloo LEARN help](#)

## Appendix A: Departmental TA Manuals

Several departments on our campus developed TA manuals or handbooks tailored to the teaching context of the department and specific roles of their TAs. Below is a list of available TA manuals/handbooks at Waterloo.

[Classical Studies, Graduate Student/TA Handbook:](#)

[Chemistry, Teaching Assistantship Orientation Manual:](#)

[Computer science, ISA/IA/TA Guide:](#)

[English, A Handbook for Teaching in the Department of English:](#)

[Germanic and Slavic Studies, Graduate Student Handbook](#) (pp. 27-51 are devoted to TAs):

[History, Research Guide for Teaching and Marking Assistants in History:](#)

[Math, Graduate Student Teaching Assistant Manual:](#)

[Psychology, Teaching Assistant Handbook:](#)

[Physics and Astronomy TA webpage, with links and forms for TAs:](#)

If your department has an online TA manual/handbook which is not listed here, please email Svitlana Taraban-Gordon ([staraban@uwaterloo.ca](mailto:staraban@uwaterloo.ca)) and we will include it in this document so that it can be shared with the campus community.

## Appendix B: TA Awards at Waterloo

### University-wide teaching awards for graduate students

[Amit & Meena Chakma Awards for Exceptional Teaching by a Student](#)

### Faculty-wide teaching awards for graduate students

**Warren Ober Award for Outstanding Teaching by a Graduate Student in the Faculty of Arts  
(no site available)**

[Faculty of Engineering, Sandford Fleming TA Award](#)

### Departmental teaching awards for graduate students

[Chemistry, Outstanding Graduate/Undergraduate Teaching Assistantship Award](#)

[Combinatorics and Optimization, Outstanding TA Award](#)

[Computer Science, Teaching Assistantship Award](#)

[Electrical and Computer Engineering, ECE Distinguished Teaching Assistantship Award](#)

[English Language and Literature, TA Award for Excellence in Teaching and Independent Graduate Instructor Award for Excellence in Teaching](#)

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*Svitlana Taraban-Gordon, editor*

*Centre for Teaching Excellence*

## Feedback

Feedback about the content of this manual as well as questions and comments should be directed to Svitlana Taraban-Gordon: [staraban@uwaterloo.ca](mailto:staraban@uwaterloo.ca).