

TA MANUAL

Electrical and Computer Engineering

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CONTENTS

Introduction.....	1
Contact Information.....	1
TA Structure and Weightings	2
Lectures, Tutorials and Labs.....	2
TA Training	2
ExpectATions	2
Department Specific Training.....	3
Safety Training.....	3
Center for Teaching Excellence (CTE) Resources	3
Applying to be a TA	4
Eligibility	4
How to Apply.....	4
Selection Process	4
Offer Letters.....	5
Round 2.....	5
Probation Period.....	5
Getting Paid	5
Expectations Before the Term Starts	6
Meeting With the Course/Lab Instructor	6
Expectations After the Term starts.....	7
Roles and Responsibilities	7
Common Issues	7
A Note on Office Hours	8
When the Course Instructor is Also Your Supervisor.....	8
Additional Proctoring Assignments.....	8
AccessAbility.....	9
Academic Integrity.....	9
Conflicts of Interest.....	9
Student Information and Privacy	10
Copyright Issues.....	10
Short Leave/Illness During the Term.....	10
TA Safety	10
Laboratory TAs.....	10
Lab Safety	11
Preparing for a Lab Session	11

Running a Lab Session.....	11
Demerit Point System	12
Effective Presentation and Teaching skills	13
Courses and Resources	13
Preconceptions and Bias	13
Department Resources for TAs.....	14
Dealing with Stressed Students.....	14
TA Evaluations	14
TA Awards.....	15
Departmental TA Awards	15
University TA Awards	15
International TAs	15
Study Permit and Social Insurance Number	15
The Canadian Classroom	15
Language and Teaching	16
Useful Resources and Supports	16
Websites.....	16
Relevant Policies.....	17

INTRODUCTION

Teaching Assistants (TA) are an important part of the classroom environment at the University of Waterloo. They enhance the student learning experience by complementing the activities of the course instructor. TAs are responsible for numerous tasks including tutoring, marking, laboratory and/or project assistance, office hours, proctoring exams, and other duties assigned by course instructors. TAs must demonstrate a mastery of the course material and be able to convey that knowledge to students in an effective and accessible way. TAships allow students to develop critical skills in teaching and communication which are of great value in the workplace.

This manual is meant to help students navigate the roles and responsibilities of being a TA in the Department of Electrical and Computer Engineering. It will provide an overview of the application process, expectations of holding a TAship, the policies and regulations governing TAs, as well as address many common questions and concerns graduate students have. While this manual is not a comprehensive guide to teaching assistantships it should provide you with the information and resources needed to be an effective member of the University of Waterloo teaching community.

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TA STRUCTURE AND WEIGHTINGS

The Ontario Ministry of Education and Training restricts the employment of all full-time graduate students to a maximum average of 10 hours per week. This policy is outlined in the [Guidelines for Graduate Student Support](#) and in the [Graduate Studies Calendar](#). As such, Graduate Teaching Assistants enrolled in a full-time program may not hold other positions within or outside the university, such as a Research Assistantship, a Sessional appointment, or other employment exceeding a total of 170 hours per term.

Teaching assistantships are allocated based on a 17 week term to a maximum of 170 hours per term or 10 hours per week average. The Faculty of Engineering has assigned a full TAship (1.0) a value of 130 hours and a half TAship (0.5) a value of 65 hours. Based on this weighting scheme, the maximum TA a student can hold in a given term is 1.3 or 170 hours. TAships cannot be weighted less than 0.3 or 39 hours.

The Department of Electrical and Computer Engineering does not permit students to hold more than one TAship per term regardless of weight except in some exceptional circumstances where the same course instructor would like to use a single student for two courses in a given term. Even in these rare cases, the total number of hours cannot exceed 170. This rule is in place to avoid potential time conflicts with overlapping classes, exams, and marking.

Lectures, Tutorials and Labs

TAships typically cover three different classroom environments; lectures, tutorials and labs. Each of these classrooms offers different responsibilities a different set of challenges to the TA.

Most courses, undergraduate and graduate, have a lecture component. Lectures typically take place in a traditional classroom setting and meet one to four times per week for a total contact time of two to four hours. Class size will vary from course to course but lectures usually have a large instructor to student ratio. TAs working in lecture courses will usually have marking and office hours as their primary responsibilities.

Tutorials are designed to provide students with additional information and assistance on the course material presented in the lectures. Only undergraduate courses have tutorial components. Usually tutorials meet once a week for a total contact time of one to three hours. Tutorials in Engineering are typically problem solving sessions where lecture material is applied to problem sets but may also be conducted as an open discussion of material. Their size will vary from course to course, especially if attendance is optional, and, like lectures, usually have a large instructor to student ratio. TAs working in tutorials will have tutorial preparation and delivery as their primary responsibilities.

Lab sessions take place in a specially designed room containing particular equipment which is required for hands on observation, participation, experimentation, or practice. Only undergraduate courses have lab components. Normally there are one to three meetings per week for a total contact time of one to three hours. Labs are an opportunity for students to apply course material in a practical setting and, as such, require a great deal of knowledge application on the part of the TA. Lab sections are typically smaller and have a lower instructor to student ratio. TAs working in labs will have lab preparation, delivery and marking as their primary responsibilities. Depending on the lab, additional safety training may be required to be completed by the TA.

TA TRAINING

ExpectATions

All TAs are expected to complete online and in person training before holding a TAship. The Faculty of Engineering offers **mandatory** training for all TAs twice a year in the [ExpectATions workshop](#). This is a two-day workshop, typically held in December and April, that aims to prepare Engineering graduate

students to undertake TAships. Students who successfully complete the workshop receive a certificate of completion and are eligible to TA in future terms. The ExpectATIONS workshop only needs to be completed once.

In the workshop you will work in small, discipline-specific groups of 12 people or less. Each group has a faculty mentor and a senior student mentor assigned to them. These mentors will lead the training activities and augment the workshop with their own personal experiences and perspectives on TAing. In the workshop, students will learn about the roles and responsibilities of TAs, practise giving lessons and marking student work, and examine the working relationships between TAs, professors and students.

In addition to group work, the ExpectATIONS workshop also has an online component where students are required to complete a series of modules developed by the Center for Teaching Excellence (CTE) that cover harassment and discrimination, academic integrity, and health and safety.

Department Specific Training

The Department of Electrical and Computer Engineering holds a department specific workshop for all ExpectATIONS workshop participants in the afternoon of the first day. This session is comprised of two presentations given by the ECE Teaching Fellow, Prof. David Wang, and the Graduate Attributes Lecturer, Prof. Derek Wright. These two dynamic and engaging faculty members will impart their wisdom and experiences to workshop participants highlighting the keys to being a successful and effective TA in all classroom environments. Students who do not attend the department training session will not be awarded the certificate of completion for the ExpectATIONS workshop, will have any existing TA offers withdrawn, and will not be eligible to hold a TAship until all parts of the workshop have been successfully completed.

Safety Training

As employees of the university, all TAs are required to complete the following mandatory training;

- [SO1001 - Employee Safety Orientation](#)
- [SO2017 - WHMIS 2015 for Employees](#)
- [SO1081 - Workplace Violence Awareness](#)
- [SO1100 - Supervisor Safety Awareness](#)
- [Accessible Customer Service Training](#)

These courses are available online. If you are assigned as a lab TA you may be required to take additional training sessions. Your Lab Instructor will inform you if this is the case. Failure to complete all required lab/workplace safety training courses prior to the start of the term will result in immediate termination.

Center for Teaching Excellence (CTE) Resources

The [Center for Teaching Excellence](#) (CTE) at the University of Waterloo has excellent resources for graduate students and TAs including:

- Three certificate programs in University teaching
- Individual Fundamentals of University Teaching [workshops](#),
- A special course for international TAs called CTE 210: [Preparing to Teach at UW](#),
- An opportunity to have your teaching observed and receive feedback.

All of these resources are available to UW students free of charge.

APPLYING TO BE A TA

Eligibility

In order to apply to be a TA in the first round of applications, students must meet the following criteria:

- Must be an MASc, PhD or MEng student in Electrical and Computer Engineering
 - Must be within their first 6 terms for MASc students
 - Must be within their first 13 terms for PhD students
 - Must be within their first 6 terms with an overall average of 85% or higher for MEng students
- Must be active, full-time on-campus in the term the TAship is held
- Cannot be on probation in the term of application
- No TA infractions from the term of application
- No more than 1 TA infraction from previous terms
- Cannot be in the final term of study for your program

How to Apply

An e-mail calling for TA applications for a given term will be sent out early in the second month of the term prior (October for Winter term, February for Spring term, June for Fall term). Only students who are eligible to apply will receive this e-mail.

Students will be given two weeks to apply once the application e-mail has been sent out. Late applications will not be accepted. Students should speak with their supervisor(s) before applying for a TAship.

Applications are submitted through an online system. Students can select up to three courses to apply for as well as the maximum TAship they are willing to accept (0.3 to 1.3). Students should only be applying for TAships in courses which they have the necessary background knowledge and skills required. Once an application is submitted the student's supervisor is notified and given the opportunity to veto the application.

Students who have missing safety training will receive an e-mail advising them of any missing courses and a deadline by which to complete them. Students who have not completed their safety training by the deadline will not be eligible for a TAship.

ECE does not have enough TA positions to guarantee a position to all applicants and also does not accept applicants from other departments in the first round for this reason.

Selection Process

After the application site closes course and Lab Instructors will be given two weeks to rank the applicants for their courses. Instructors are encouraged to interview applicants during this time.

After the ranking has closed the application data and instructor rankings are loaded into a database which runs an algorithm to match TAs and courses based on the student's ranking and weight preference, and the instructor's ranking and TA allotment for the course. One-one matches (i.e. where the course is the student's first choice and the instructor has ranked the student a one) are honoured first and then the remaining spaces are filled. Note that in cases where there are more one-one matches than TA positions, the available positions will be assigned randomly amongst the one-one matches.

The TA Assignment Committee meet to review the assignments and make any necessary adjustments or changes. The TA Assignment Committee then presents the preliminary assignments to the department area reps and the ECE GSA TA rep for approval. This process may take up to two weeks to complete.

Offer Letters

Once all TA positions have been allocated, TA offer letters will be sent out via e-mail to all students who have received a TAship. Typically, offer letters are sent out one month before the start of the term.

Students who receive a TA offer letters should read over it over carefully as it is an employment contract. Offer Letters should be returned to the ECE Graduate Funding Coordinator in EIT 3022 by the listed due date. Offer letters not submitted by this date will be assumed to be declined and another candidate will be selected.

Students who do not receive a TAship in the first round of applications are automatically put on a waitlist which is distributed to all course instructors who are short TAs for their courses.

Round 2

After the first round of online TA applications is complete, there are often courses which are still short TAs or courses that receive a TA allocation increase later in the term due to increased enrolment. These courses go to what is referred to as “Round 2” in the TA selection process.

In Round 2, course instructors are permitted to hire anyone to fill the vacant TA position. This means that students who were initially ineligible in Round 1 due to term count, enrolment status, or grades are now eligible to be hired. As mentioned, all instructors who are short TAs after Round 1 receive a copy of the TA waitlist which includes the name of any TA who applied in Round 1 but did not receive a TAship as well as other, previously ineligible, students who have requested to be on the list. Instructors do not have to hire a student off the waitlist, however, preference is always given to active ECE graduate students.

Students hired in Round 2 are still subject to the same training requirements and employment obligations as student’s in Round 1.

Probation Period

A three week probationary period is a condition of all TA contracts. During this time, your performance will be monitored and evaluated by the course instructor/Department and either may extend your probation at their discretion. Should you or the course instructor find the employment relationship unsatisfactory, the relationship can be terminated at any time during the probationary period without notice.

GETTING PAID

To ensure fair and equitable rates across campus, the University regulates TA salaries. Salary rates typically go up each year in May to be in line with mandated cost of living increases.

All students who accept a TAship must be eligible to work in Canada and have a valid SIN. International students should read the [International TA](#) section of this document for more information. Before the start of term, each TA must register with Human Resources by completing a [Personal Information Form](#) and [TDI information forms](#) (Federal and Provincial).

The *Personal Information Form* contains all of your personal data as well as your SIN and banking information. Please note that payments can only be made to Canadian bank accounts.

The *Federal TDI Form* and *OntarioTDI Form* are used to calculate the amount of tax which you are subject to based on a list of eligible deductions. If you need assistance completing these forms please refer to the Tips for Completing TD1 forms on the [Human Resources website](#).

A student only needs to register with Human Resources once unless there is a change in their personal or banking information. To check that your banking information on file is correct you can login to the [MyHR website](#) using your Quest credentials and view all your payroll information. Completed forms can

be taken directly to Human Resources in East Campus 1 or brought to the ECE Graduate Funding Coordinator where they will be sent via internal mail to Human Resources.

TAs receive equal monthly payments on the last Friday of each month through direct deposit into their bank account. These payments will include 4% vacation pay, and statutory deductions. Students who have not registered with Human Resources and/or not provided a valid SIN will not be paid.

If, for any reason, you require confirmation of your employment history at the University of Waterloo (GRA or TA), please complete a [Request for Employment Letter](#) and submit it to Human Resources in East Campus 1. The department cannot issue employment confirmation letters under any circumstances.

EXPECTATIONS BEFORE THE TERM STARTS

Meeting With the Course/Lab Instructor

Once you have accepted a TAship, you should get in contact with the course/lab instructor. It is important that you clarify your duties and their expectations early on to avoid any misunderstanding later in the term.

Things you should consider asking the instructor about are:

- How will I stay in contact with the course/lab instructor?
- Will there be regular TA meetings? If so, when?
- What are my specific responsibilities and what is the hourly breakdown of those responsibilities? If there are several TAs, how will the work be divided?
- Am I expected to attend lectures?
- Do I need access to LEARN?
- What is the expected start date of the position
- What is the course schedule? Ask for a copy of the syllabus and any reference materials such as textbooks, lab manuals, solution manuals, etc.
- If I will be marking, what is the expected turn around time on marking?
- How will marks be recorded?
- How many office hours should I hold and when
- Will I be responsible for responding to student emails or discussion posts? What are the expectations for responding?
- Any other expectations the instructor has of me as a TA which have not yet been addressed
- Lab TAs should also consult the [Laboratory TA](#) section of this manual for additional information

The Center for Teaching Excellent also has a [Teaching Assistant Checklist: Questions to Ask](#) with additional questions such as:

- How does my supervisor define my role? (e.g., what is involved in running a tutorial?)
- 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?
- If I will be leading discussions, how should I run the sessions?
 - Should I stay close to the text or the lectures?
 - Should I encourage all students to talk or should I do most of the talking?
 - Should I only deal with students' problems in discussions?
- If I will be conducting labs, what is the scope of my responsibilities?
 - Do I keep track of supplies and materials?
 - Do I obtain supplies and materials?
 - Do I design or revise experiments?
 - Do I give demonstrations?

- What do I do in case of emergency or accident?
- If I am to evaluate/grade papers, projects, reports, quizzes, exams, and/or student participation, are the criteria for assigning grades clear?
- Is the process/formula for determining a final grade clear?
 - Who reviews disputed grades?
 - How much time will I have for grading?
 - Should I make two copies of all grades?
- What audio visual equipment do I need to know how to use? Am I responsible for getting and returning it, or do I book it from someone?
- How much autonomy will I have to present new ideas, use different teaching methods, or present perspectives different from the instructor's?
- What should I do, whom should I contact, if I am unable to attend a class/lab/tutorial?
- What other responsibilities will I have?

It is important you understand the scope of your TA responsibilities and budget your time accordingly before the start of the term.

EXPECTATIONS AFTER THE TERM STARTS

Roles and Responsibilities

Once the course is in session, you will be responsible for all of the tasks assigned to you by the course instructor. TA duties may include tutoring, marking assignments, laboratory and/or project assistance, holding office hours for consultation with students, proctoring exams, and other duties assigned by the course instructor or department. In addition to the above, TAs may also have some administrative duties such as photocopying, entering marks, calculating class averages, checking printed exam to make sure there are no pages missing or copy errors, and setting up for lectures/labs.

Teaching Assistants are required to be available the first day of the first month up to the last day of the last month of the assigned term.

Over the course of the term you should be in frequent contact with the course instructor. Items for discussion can include:

- Your observations and experiences in the course including any issues that come up
- Questions regarding assignment or exam marking schemes – flag any assignments you are unsure of to discuss
- Course concepts - if you do not understand something, ask the instructor for clarification
- Difficulties with individual students - let the instructor know immediately and refer the student to the instructor to discuss their problems

If you are having difficulties with the course/lab instructor, talk to the instructor first to try to come up with a solution. If you are unable to resolve the issue independently, you can speak to the ECE Graduate Funding Coordinator, the Faculty TA Coordinator, your ECE GSA representative, or any other member of the ECE graduate team for assistance.

Common Issues

Below are some of the common issues students have with their TAs and recommendations on how to avoid them:

1. TAs can be seen as “unapproachable, unfriendly, condescending, and impatient”

Demeanor and affect are very important when dealing with students. What might seem simple or easy to you could be difficult for others and, as a TA, it is your responsibility to guide the student to understanding without just giving them the solution or making them feel dumb. When students come

with questions or need help, ask them probing questions to understand their reasoning and thought processes. Take time to ensure they understand what you are telling them and give them additional resources if needed (i.e. pointing out the relevant section of the textbook). Students will pick up on your passion and enthusiasm, or lack thereof, for the course material and it will directly impact your ability to be an effective teacher.

2. The students feel the TA is unfamiliar with course material and assignments

Ensure that you are prepared to meet with students by reviewing the relevant course material and assignments. You should be able to answer routine questions and have the course material on hand to refer back to. For more difficult questions, think before you answer and be honest if you do not know. Tell the student you will follow up with them once you get the answer (and make sure you do follow up with them). In tutorial and lab settings, don't just sit at the front of the room. Walk around and engage the students, answer questions and get a feel for their progress. ALWAYS solve the tutorial questions before the actual tutorial.

3. TAs just follow the marking scheme and won't admit another solution is correct

If you make sure that you understand the material, marking unique solutions should not be a problem. Your marking style will depend on the course instructor's guidelines but always be sure to examine a student's solution carefully and clearly mark errors; provide short comments if necessary.

A Note on Office Hours

TAs are often required to hold office hours as part of their regular duties. This is an excellent opportunity for students to seek one on one help and for you to really connect with the class on an individual level. TA hours are often held in offices and it is important to remember that if you are alone in the office that you never close the door to be alone with a student, especially in a situation where it is one male and one female. This is to protect you and the student from any sort of harassment or claims of harassment. If the door is open, there is a much greater level of safety and security.

If a student requests the door be closed, ask them if it is ok if the door is left slightly ajar or let someone else in the hallway know you are shutting the door and have a student in your office. While it is important to respect student privacy, it is also important to maintain a safe and secure work and learning space for everyone. For more information please feel free to review the [Conflict Management & Human Rights Office Guidelines For Teaching Assistants](#).

When the Course Instructor is Also Your Supervisor

Often course instructors like to hire their own research students to TA their courses. This can be advantageous for both parties because you are familiar with each other's style, expectations, work ethic and have similar interests in the course material. They might also be more flexible with your schedule because they have a stake in your research and progression as a graduate student as well.

At times, however, this arrangement can be problematic if the instructor starts asking you to complete extra duties or additional special assignments which are outside of your allotted work hours. When they ask for a favour or would appreciate you doing something that is outside the scope or normal TA duties it can be hard to say no because they are also your academic supervisor. Instructors should avoid blending employment and academic relationships in this way but it can happen. If you are experiencing difficulties with this type of situation it is important that you speak to the Faculty TA Coordinator or a member of the ECE Grad Team for assistance and guidance on how to proceed.

Additional Proctoring Assignments

In addition to your assigned duties, a 1.0 TAship or higher may include the proctoring of one additional mid-term and one additional final exam for another course. A 0.9 TAship or lower may include the proctoring of one additional midterm or final exam for another course. You will receive an email

indicating the additional proctoring assignment. If you have a conflict with the additional proctoring assignment, it is your responsibility to find a current ECE TA to proctor the additional assignment for you and notify both the course instructor and the Manager of Undergraduate Studies of the change.

AccessAbility

Certain students who have both permanent and temporary disabilities may require the supports offered by [AccessAbility Services](#) on campus. Their goal is to collaborate with the university community to support equal access to university education by designing academic accommodation plans, facilitating the implementation of accommodations, and increasing awareness of the impact of disability on the student experience.

Students requesting accommodations in the course work should be going through AccessAbility Services. Backdoor deals must not be made with students for accommodations. If you receive documentation from AccessAbility Services for a student, give it to the course instructor and they will advise you on how to proceed. For more information you can review the [Accommodation Resource for Instructors](#) on the AccessAbility Services website.

Academic Integrity

Students at the University of Waterloo are expected to conduct their studies with integrity at all times. It is important that you influence and encourage positive behaviour from your students in this respect. There are many reasons why students say they cheat. The [Center for Teaching Excellence TA Manual](#) has a list of these reasons and ways to deal with each circumstance on page 30.

Often students from different cultures will struggle with North American ideals of academic integrity and find the guidelines very strict and counterintuitive. Students may commit academic misconduct inadvertently because of an incorrect understanding of the appropriate sharing of information. All instances of academic misconduct need to be brought to the attention of the course instructor immediately.

For more information on Academic Integrity including an explanation of [what is considered misconduct](#) you can visit the Office of Academic Integrity [website](#).

Conflicts of Interest

Decisions made by TAs have a significant effect on student performance and grades. TAs should carry out their duties with the utmost professionalism and be especially careful not to abuse their authority. All student work should be evaluated objectively and fairly. Occasionally, TAs might experience conflicts of interest in the course of their duties. Conflicts of interest might include your significant other being a student in the course you are TAing, a student in your course asking you to tutor them for pay during the term of the TAship, or personal feelings/biases towards an individual that would prevent you from teaching and evaluating them in a fair and equitable way.

When a conflict of interest arises you need to let the course instructor know immediately. Together, you can work out the best course of action to overcome the issue. Typically, this would mean that you abstain from evaluating the student's work in any way (another TA or the course instructor would do this). Solutions to conflicts of interest are often quite simple and almost never involve the termination of the TAship so it is important that you are honest with the course instructor if an issue arises.

If you are ever unsure of a situation is a conflict of interest or not, you are encouraged to speak to the course instructor, lab instructor, or member of the ECE Grad Team for guidance.

Student Information and Privacy

[Policy 46](#) on Information Management outlines the responsibility of University employees to effectively manage and safeguard all information relating to the roles and responsibilities of their position. This policy is based on several Federal statutes which must be complied with at all times. As a TA you should read this policy and understand what your limitations are in terms of information disclosure. Student information, course materials, grades, and other relevant material must be kept confidential unless you have express permission to disclose it.

At no time should any student information be disclosed to an unauthorized individual. If a student has spoken to you in confidence, however, and you feel that they are a danger to themselves or others you should contact Counselling Services (x32655) or Police Services (x22222) immediately.

Copyright Issues

Often times an instructor or TA wants to copy or communicate copyrighted material in the classroom. It is important that you, as a TA, understand what your rights and duties are in regards to what uses of copyright material require the securing of permission from rights holders, and which do not. The [Copyright Guidelines – Guide for Instructors](#) is an excellent resource published by the University of Waterloo to help you navigate this difficult subject. In addition to the University's policy on certain types of copying there is also an FAQ page, content examples, and contact information if you have further questions.

Short Leave/Illness During the Term

It is expected that there will be no conflicts such as graduate course enrollment, vacation, job, conference attendance, or other similar situations during the term of the TAship. In extenuating circumstances, a situation may arise that prevents you from completing the assigned duties. In this case, it is your responsibility to:

1. Obtain approval from the course instructor for the absence;
2. Arrange for a TA substitute who is acceptable to the course instructor
3. Inform the Graduate Funding Coordinator of the situation and replacement's information

TA Safety

In extremely rare circumstances, a TA may find themselves being threatened or harassed by a student, either in person or online (e-mail, social media, etc.). This behaviour should be taken very seriously and immediately be reported to the course instructor and the Faculty TA Coordinator who will attempt to resolve the issue.

LABORATORY TAs

TAs who have been assigned to work in labs have a unique opportunity to engage with students in a dynamic and hands-on environment. While working in a lab offers a unique experience for a TA, it also has additional expectations beyond what a marking TA or tutorial TA might require.

Note: Before the end of the third week of term, lab TAs may be required to complete all lab exercises and submit associated deliverables to the lab instructor to demonstrate competency, in addition to successfully completing a lab test run by the lab instructor.

Lab Safety

Above all else, lab TAs must be familiar with the safety requirements for the lab they will be working in. In addition to the required safety training mandated for all TAs, lab TAs may be required to complete additional lab/safety training depending on the nature of the lab.

Before the term starts you should visit the lab room and familiarize yourself with the following:

- The [ECE Safety Manual](#)
- Know where the telephone is in case of emergency.
 - In an emergency, call 911 from a campus phone rather than a cell phone. Using the campus phone will notify campus police who will have a much faster response time than external emergency services
- Know the location of all emergency exits, fire alarms, evacuation routes, and assembly points
- Know the location of any first aid kits, fire extinguishers, fire blankets, eyewash stations, and emergency showers. You should also know how to use each of these things.
- If the lab will involve any chemicals, make sure you read and understand the Material Safety Data Sheet (MSDS) and WHMIS symbols for each one.
- Know how to deal with major and minor spills of any chemicals or materials that will be used
- Familiarize yourself with how to operate any fume hoods in the lab
- Find out what acceptable lab attire is and what protective equipment is required (i.e. close toed shoes, safety goggles, pants, lab coats)
- Review lab handouts and procedures

The following laboratory regulations should be adhered to at all times:

- No food or drink in the lab
- When required, appropriate protective equipment must be worn at all times
- Do not use lab equipment you are unfamiliar with – read the manual first or ask for help
- At the end of each lab all equipment and materials should be put away in their original locations

As a lab TA, you must lead by example by following all safety guidelines as well as ensuring others are following them too. You are responsible for your own safety and liable for the safety of every student in the lab so caution and care is required at all times.

Preparing for a Lab Session

It is important to be well prepared for each lab session. This will ensure the class runs smoothly and help to maintain a safe working environment.

1. Read over the lab manual and assignments for the week.
 - Make sure you understand the objectives and expected learning outcomes for the exercise
 - If you are fuzzy on any of the material or concepts do some background reading or consult with the lab instructor prior to attending the lab
2. Meet with the lab instructor and go over the availability and location of equipment and supplies. Note any changes that students may need to be aware of
3. If you need to present any material, begin rehearsing several days in advance so you will be comfortable on the day of the lab
4. On the day of the lab, arrive early to help set up if needed – this way you will also know if there have been last minute changes to the lab as a result of missing or broken equipment

Running a Lab Session

While all labs will differ in content, the following steps will help you run an effective lab session:

1. Always start on time – if students know you start on time they will be there on time
2. Cover any important information or announcements before the lab starts
 - Always review safety guidelines associated with the lab and point out important safety concerns and emergency aids such as eyewash stations, and fire extinguishers
 - Additional safety information should be given for any new/special equipment or materials introduced in the current lab exercise
 - Provide a brief overview of the relevant theory and steps required to complete the lab
 - Ensure students understand the objectives and learning outcomes of the lab as well as any real world applications which may be relevant
 - Demonstrate any complicated procedures or special equipment that will be needed
 - Ensure any pre-lab talk/presentation is concise to maximize student time to complete the assigned exercises.
3. Circulate around the room as students are working – ask them probing questions to make sure they understand key points and are on the right track
4. When providing support to lab groups, be equitable with your time and ensure all students receive the support they need within a reasonable time
5. If you notice a few groups having the same issues address the whole class and explain/demonstrate the difficult section. If a few groups are having issues it is likely more groups are having the same issue
6. At the end of class make sure students clean up their work stations if required
7. Summarize key points and conclusions and discuss any results which were different than expected

DEMERIT POINT SYSTEM

The ECE Department tracks TA infractions and enforce a demerit point policy. When an infraction is logged, an email will be sent to the TA, the TA's academic supervisor, and the Faculty TA Coordinator.

TA infractions and the associated penalty are as follows:

1. Failing to show-up and perform an assigned duty (e.g., proctoring assignment, lab supervision, tutorial delivery, marking assignment, etc.) without acceptable documentation or failing to deliver satisfactory performance as assessed by the course and/or Lab Instructor
 - a. first infraction, one demerit point, and you will be prevented from holding a TAship in the next term
 - b. second infraction, second demerit point, and you will be prevented from holding a TAship for the remainder of your program
2. Signing a contract initially and then resigning without acceptable reasons.
 - a. first infraction, one demerit point, and you will be prevented from holding a TAship in the next term
 - b. second infraction, second demerit point, and you will be prevented from holding a TAship for the remainder of your program
 - c. Acceptable reasons for signing a contract and then resigning include going inactive for a work experience opportunity, receiving an award with employment restrictions (i.e. the Doctoral Thesis Completion Award), or other extenuating circumstances such as major illness

If you complete two terms of satisfactory TAships after receiving a demerit point the point will be removed from your record.

In the case of an appeal/grievance, the ECE TA demerit point tribunal, comprised of the Associate Chair of Undergraduate Studies, the Associate Chair of Graduate Studies, and the ECE GSA TA representative, will hear the case. If one of the tribunal members has a conflict-of-interest, the ECE Chair will replace that person on the tribunal.

EFFECTIVE PRESENTATION AND TEACHING SKILLS

Courses and Resources

Some people are natural presenters and entertainers. They can get up in front of a group of people without fear and have them hooked on every word with just a few sentences. For some people, however, this can be difficult. If you struggle to speak in front of others and have a hard time conveying ideas and concepts you are not alone.

While the mandatory TA training in ExpecTAtions and department workshops aim to help you develop the skills and techniques to make you a better educator and presenter, sometimes you need more support. There are a number of resources on campus to help you with this.

The University offers several courses on public speaking which graduate students can take including:

- GS 901 - Preparing for University Teaching
- SPCOM 223 - Public Speaking
- SPCOM 226 - Intercultural Communication

As previously mentioned, the [Center for Teaching Excellence](#) (CTE) at the University of Waterloo offers individual Fundamentals of University Teaching [workshops](#), a special course for international TAs called CTE 210: [Preparing to Teach at UW](#), and an opportunity to have your teaching observed and receive feedback. They also offer 6 modules on [Teaching and Learning in Higher Education](#) which cover everything from how students learn to the globalization of learning.

[MyGradSkills.ca](#) is another resource that provides free online professional development modules for graduate students including lesson planning and teaching online.

Preconceptions and Bias

Canadian classrooms are an environment where all students are welcome and equal regardless of race, religion, gender, or sexual orientation. While these can be uncomfortable topics, it is important to be aware of personal and group biases. Spend some time on self-reflection and consider the following¹:

- Are you conscious of expectations you may have about student performance based on something other than academic merit such as gender, ethnic background, or age?
- How do you react to uses of language (accent or dialect) that are different? How do your students react to your accent (if you have one)? Do you discount the speaker's intelligence and information because of the way they speak?
- Do you call certain students by name and not others? Why do you know their names and not others? Are you calling on both males and females of various ethnicities to answer questions?
- Are your verbal responses to students positive or aversive? Encouraging or discouraging? Is it the same for everyone? If not, what is the reason? Is it based on presumptions or biases on your part?
- Do you tend to address one section of the class more often or establish eye contact with certain students more than others? Are your gestures and expressions the same for men and women, people of colour, international students, those of different ages or levels of ability?

¹ Adapted from the York University [International TA \(ITA\) Handbook](#), pg. 18-19

- Are you making sure to address gendered language, racist language, homophobic language, or other uses of language that could be perceived as hurtful (i.e. “that’s stupid” or “that’s gay”)?

No one is perfect and we all have some inherent biases or preconceptions but if you are aware of them and work to overcome them, you will have a more successful TA experience.

DEPARTMENT RESOURCES FOR TAs

TAs in need of a course textbook or solutions manual for their assigned course can pick one up from the ECE Undergraduate Office located on the third floor of EIT

TAs who do not have an office to use for office hours can book a department room by e-mailing ECE Room Bookings at eceRooms@uwaterloo.ca.

If you need to photocopy course materials, you can use the TA photocopier located next to the Department reception area. Speak to the Department Assistant at the front desk to get the password for the copier. Before copying any materials ensure that you are abiding by all [copyright policies and guidelines](#).

Markers for whiteboards and other classroom materials can also be obtained from the ECE Department Assistant.

DEALING WITH STRESSED STUDENTS

As you are probably well aware, it is not unusual for students to feel stressed and overwhelmed during the course of the term. Academic and external/personal pressures can make students depressed, anxious and even suicidal. As someone who is in regular contact with students, it is important that you are aware of [potential signs of distress](#) and [act accordingly](#). You are not expected to be a therapist or doctor but you need to be aware of what to do if a student tells you they need help or you suspect something is wrong.

Please take the time to review the Counselling Services [website](#) for Faculty and Staff supporting students.

If you feel uncomfortable with the situation at any time refer the student to the course or Lab Instructor, any member of the Department staff, or directly to Counselling Services in Needles Hall. If it is after hours and you feel the student is a danger to themselves or others you should contact campus police immediately at ext. 22222.

Sometimes students just need someone to listen to them. Provide an empathetic ear, offer assistance where appropriate and avoid being dismissive. If necessary, refer them on to someone on Campus who can help.

TA EVALUATIONS

At the end of each term, students and instructors have the opportunity to evaluate their TAs in an online survey. These surveys help to give TAs and the Department feedback on their performance. The data is also used to determine who the recipients of the term TA awards will be.

Towards the end of term, students and course/lab instructors receive an e-mail prompting them to log onto the online TA evaluation system and rank the TAs for their course(s). All responses are anonymous and results are not made available until after the term is complete and final marks have been submitted.

Survey results will be made available to the TA, as well as; the course instructor, lab instructor, Lab Director, Associate Chair for Undergraduate Studies, Associate Chair for Graduate Studies, Senior Associate Chair, and the Department Chair. TAs with very poor survey numbers may be blocked from TAing in ECE in the future. TAs with outstanding survey numbers will be strongly encouraged to apply for future TA positions. TA evaluation results will also appear on your online TA application in future terms for course instructors to view.

An e-mail will be sent to all TAs when the evaluations are available for viewing as well as the average data for all TAs for that term so you can compare your results.

TA AWARDS

Departmental TA Awards

Each term the Department awards five Teaching Assistantship awards. In order to be considered for a TA award you must be an ECE student TAing in an ECE mounted course. As well, the TA position must carry a weight of 1.0 (full TA) or more, with more than 15 responses, or greater than a 20% response rate on the TA survey. Awardees cannot have received an ECE TA award in the past year.

Students who receive this award are given a certificate of recognition and are invited to lunch with the Associate Chair of Graduate Studies and the Associate Chair of Undergraduate Studies. There is no monetary value to this award.

University TA Awards

There are two awards for Teaching Assistants outside of the Department.

The Faculty of Engineering [Sandford Fleming TA Award](#) is open to teaching assistants in undergraduate courses. One award is made annually by each academic department and the first year office. Classes must submit a nomination form for their TA to be considered.

The [Amit & Meena Chakma Award for Exceptional Teaching by a Student](#) is a University wide award which is given to four student annually. To be considered for the award, a nominee must be endorsed by at least five individuals, including present and past students and the faculty supervisor(s) of the nominee.

INTERNATIONAL TAS

Study Permit and Social Insurance Number

International students need to have a valid [study permit](#) and [social insurance number](#) (SIN) to work as a TA. The study permit needs to clearly indicate that the bearer is eligible to work in Canada. If you have any questions regarding your study permit or its contents you should contact the [International Student Experience](#) in South Campus Hall where a certified RCIC advisor can assist you.

All TAs are required to provide Human Resources with a valid SIN number before the first pay period of each term. If not already on file, a copy of your valid SIN number should be taken to the Human Resources office in [East Campus 1](#) (EC1) so they can enter it into your record.

If you are an international student and do not have a valid SIN for the term of employment you will need to go to a Service Canada centre to apply for one. You will need to bring your passport and study permit with you to apply. The [nearest Service Canada Centre](#) to campus is located at 25 Frederick Street, Suite 200 in Kitchener.

For more information on social insurance numbers and how to apply you can visit the [International Student Experience website](#) or the [Government of Canada Social Insurance Number website](#).

The Canadian Classroom

Most international TAs will experience a culture shift coming from their home country to Canada. Classroom environments, likewise, can also differ across countries and cultures. Some international students find Canadian classrooms far more informal than they are accustomed to. The students' level of familiarity or directness towards instructors may seem rude when it is not necessarily so. Canadian

students are used to a certain level of informality when dealing with their course instructors and may even call them by their first name. This is not a sign of disrespect but merely a cultural nuance. This being said, however, you are entitled to indicate to your students how you wish to be addressed.

While the Canadian classroom might be more casual than you are used to, it is important not to let things get out of control. You can set limits and stop any behaviours that are affecting the learning environment for other students. For example, students speaking out without raising their hand may be acceptable in one situation, such as an open discussion tutorial, but can be disruptive if they are interrupting another student or the instructor during a lesson. Group behaviour can vary from course to course and it may take you a couple of classes to get a feel for the dynamics of the group.

Language and Teaching

The University of Waterloo is an English speaking institution and all instruction is delivered in English. Students will often underrate the quality of teaching if the instructor or TA's English language skills are not competent. If your mastery of the English language leaves something to be desired you may have trouble in the classroom. Often, students will become accustomed to your accent or way of speaking over time but there are things you can do to accelerate this process.²

- Come prepared for class. Review the material in advance and familiarize yourself with key words and phrases that will come up in the class. If needed, practice saying them in front of a mirror so they come out clearly.
- Encourage students to ask questions and seek clarification if they don't understand you. It is better to know earlier on if there is a communication issue and it makes you more approachable to the students
- If students are still not picking up on what you are saying try using handouts to highlight key concepts and ideas. Other visual aids such as writing on the board or PowerPoint slides can help reinforce the information you are delivering
- Allow other students to answer questions occasionally. This is not only a great way to involve students in the learning process but also takes the focus off you
- Check that you are being understood by asking questions such as "do you understand what I am saying?", "is this clear to everyone?" or even, "let me phrase this another way."

The University of Waterloo is made up of a large and diverse community of students and educators. Remember that, while you might not be a native English speaker, neither are many of the other students in the room. Taking time to review the course material before class, being confident, and asking students for feedback will go a long way in making you a successful educator.

USEFUL RESOURCES AND SUPPORTS

Websites

- [UW TA Manual](#)
- [Center for Teaching Excellence](#)
- [Conflict Management & Human Rights Office Guidelines For Teaching Assistants](#)
- [AccessAbility](#)
- [Academic Regulations Related to Assignments, Tests, and Final Exams](#)
- [Guidelines on returning assignments and posting grades](#)

² Adapted from the York University [International TA \(ITA\) Handbook](#), pg. 23-25

Relevant Policies

- Policy 30 – [Employment of Graduate Student Teaching Assistants](#)
- Policy 33 – [Ethical Behaviour](#)
- Policy 34 – [Health, Safety and Environment](#)
- Policy 42 – [Prevention and Response to Sexual Violence](#)
- Policy 46 – [Information Management](#) (*formerly Policy 19 – Access to and Release of Student Information*)
- Policy 70 – [Student Petitions and Grievances](#)
- Policy 71 – [Student Discipline](#)
- Policy 72 – [Student Appeals](#)