



# Teaching Assistant Training

## Preface

This manual is intended to summarise the information conveyed in the McMaster Engineering Teaching Assistant (TA) Training Workshop, as well as to introduce some additional information that is not covered.

TAs play an essential role in the teaching team for each course at McMaster University. Due to the smaller class sizes TAs usually observe, as opposed to instructors, TAs have a unique opportunity to interact with the students more directly, evaluate the students' knowledge level and provide immediate feedback. Being a TA is also a very valuable opportunity, as it provides an excellent venue to enhance your interpersonal skills and develop a teaching portfolio.

This manual is broken up into four sections, the first of which discusses some important general information for TAs. Following this, common grading philosophies and techniques, as well as some of the various challenges which may be faced while grading, are presented. Subsequently, relevant information as it pertains to teaching, as well as valuable approaches for preparing a tutorial/lab are discussed. Finally, several different student scenarios regarding various types of students, and how to manage them, are depicted.

# General TA Information

## Duties and Responsibilities of a TA

The TA is an instrumental part of the teaching team. During the term the TA will have the opportunity to directly assess the students' knowledge of the course material. As a result, it is their responsibility to take the time to evaluate the overall understanding of the students and relay that information to the rest of the teaching team, including the instructor. With this feedback, the teaching team can tailor the delivery of the course (including lectures, tutorials, labs, assignments, etc.) to concentrate resources where the students need them most.

Some possible roles in which the TA may interact with the students include:

- **Tutorial Leader:** Facilitates discussions around course content and possibly works through problems with students.
- **Laboratory Leader:** Leads laboratory experiments with students, reinforces content students may have learned in a course and evaluates reports.
- **Marking Assistant:** Provides feedback to students through the grading of assignments, midterms and exams.

While these are the common roles of a TA, each course has unique requirements and each instructor runs their course a little differently, which offers different challenges, and makes each TA assignment unique. This is why every TA sits down with the instructor of the course at the beginning of the semester to discuss what roles they will perform and how their hours will be distributed.

## 'Hours of Work' Form

At the start of the semester, the TA and the instructor will meet to discuss the various roles the TA will perform and how much time the TA will devote to each role. At this time, the distribution of hours is formally agreed upon using the 'Hours of Work' form, which is then signed by both the instructor and the TA. In addition to the distribution of hours, it is important that the TA discusses with the instructor when they will be required to perform each role (e.g. run a tutorial on Thursdays from 2:30 to 4:30, or be available to spend multiple hours grading the week after an exam). A TA assignment always takes priority over other responsibilities (e.g. research activities and conferences). If the TA of a course plans to attend a conference with their research group the same week that a large volume of grading is to be completed, they may find they do not have the time to attend the conference. This is why it is critical that the TA communicates with their instructor at the beginning of the term. The instructor may be able to alter the TA's role to avoid conflicts with other commitments; however they are not required to do so. If the TA is unable to meet the obligations as outlined in the TA assignment, they should forfeit or postpone their TA assignment at the beginning of the semester.

It is important that the TA keeps track of the number of hours spent on each task throughout the semester in order to identify unexpected deviations from the 'Hours of Work' form. The TA should be proactive in bringing these deviations to the attention of the instructor as they occur. The TA must consult with the instructor before they exceed their assigned number of hours. For example, if the TA is expected to spend a total of 60 hours marking two midterms, but took 45 hours to mark the first midterm, the TA should notify the instructor as soon as possible. The instructor should work with the TA to redistribute the remainder of the hours so that the TA does not exceed the assigned number of hours of their TA assignment. In some cases, the department may offer the TA

more hours to complete the task; however, it should be noted that this cannot be done after the TA has already exceeded their allotted number of hours.

## Emails and Office Hours

All email communications should be done through the McMaster email service. In other words, when a TA is communicating with students or other members of the teaching team through email they should always use their McMaster (@mcmaster.ca) email. In addition, if a student sends an email from a non-McMaster email, the TA should send a response requesting that the student resend the email from their McMaster email account. When communicating through email, remember to be courteous and maintain a professional tone. Emails can be used as evidence by the university and the courts to protect the university, TAs, and students from accusations of misconduct.

As part of a TA assignment, the TA is often asked to hold office hours, usually one or two hours a week, where students can come and ask questions about any aspect of the course material. It is important to encourage students to visit during the set office hours to discuss issues as they arise, as opposed to visiting just before a mid-term or exam. Office hours are a great venue to discuss course material covered in lectures, homework, sample problems or practical applications of the concepts covered in the course. However, the TA should not discuss the content covered in nor the format of the exam. Office hours are also not to be used for editing or proof-reading student assignments. If a student does come with an assignment and asks the TA to look at it, let them know that 'unfortunately, TAs cannot review upcoming assignments, but if they have any specific questions about the content of the assignment, you would be happy to answer them.'

## Freedom of Information and Protection of Privacy Act (FIPPA)

The part of FIPPA that most applies to TAs is the '*Protection of Privacy*'. As part of a TA assignment, the TA may be privileged to some of the student's personal information such as: names, student numbers, grades, etc. As a result, there is an expectation of privacy that must be adhered to, and is legally covered by FIPPA.

Common guidelines include:

- Do not link student ID numbers with their names.
- Do not post class lists detailing students' grades. The TA must make sure that grades written on assignments are not visible alongside a student's name or student number.
- Do not distribute student email addresses. Email addresses used on any communication made to multiple students must be listed in the Bcc: field
- Only email students through their registered McMaster email address.
- Do not discuss one student's work with another. Students may attempt to discuss their grades in the context of another student's performance (e.g. "My friend made the same mistake on the assignment and she got an A"). TAs are not free to discuss one student's performance with another, nor to disclose any information about one student to another, even if both students are present and agree.

## Academic Dishonesty

Academic dishonesty is taken very seriously at McMaster University. It is the responsibility of the TA to bring any suspicion of academic dishonesty to the attention of the instructor. Under no circumstance shall the TA address the student themselves. Academic dishonesty is the responsibility of the instructor. The instructor should address the student and pursue further recourse, which may include bringing the suspicion to the Office of Academic Integrity. If academic dishonesty is suspected, the TA must continue to mark the student's work as if the student was not suspected, however they should not post the grade before bringing their suspicion to the attention of the instructor. The TA's role is to liaise with the instructor to work towards a resolution; however, if the TA believes that the instructor did not deal with the issue properly and further action should be taken, the TA may bring the suspicion to the attention of the department chair. The TA can bring the suspicion of academic dishonesty directly to the Office of Academic Integrity; however, it is strongly encouraged to let the faculty member (instructor or chair) deal with the issue.

## Health & Safety

By law, if an employee (including a TA), does not feel safe, they have the right to refuse to work without consequence to their employment. The first action which should be taken is to speak to the supervising instructor. Almost every issue should be resolved by the instructor, either through alterations to the working environment or through education of safe practices and procedures. If the TA is not satisfied that the instructor's actions were sufficient, the TA should bring their concerns to the attention of the department's Health and Safety Committee (HSC). Each department has a Health and Safety Committee that meets regularly to ensure working conditions are safe. The issue will be addressed and brought to the attention of the Joint Health and Safety Committee (JHSC) of the Faculty, who will conduct a formal investigation to ensure that the working environment is safe. Once the JHSC has concluded that the environment is safe to work, the TA is required to return to work. Failure to do so may result in termination of the TA's employment. If the TA is not satisfied with the actions of the JHSC, and still does not feel safe, they should contact the Ontario Ministry of Labour.

During a tutorial or lab, it is the responsibility of the TA to know the safety and emergency procedures for the building they are in and the equipment they are working with. Additionally, any unsafe behaviour or potential safety hazards should be identified by the TA, dealt with if possible, and reported to the instructor or supervisor. Relevant safety information can be obtained on the Environmental and Occupational Health Support Services (EOHSS) website at [www.workingatmcmaster.ca/eohss](http://www.workingatmcmaster.ca/eohss), as well as by speaking with the instructor. Relevant safety information includes, but is not limited to: fire alarm procedures, and the location of emergency exits, fire extinguishers, emergency phones, first-aid kits, and eyewash stations.

In the case of an emergency **on campus** call campus security by dialling '88' on any McMaster phone, or 905-522-4135 on any other phone. Campus security is trained to get the emergency services, including firefighters and paramedics, to the scene of an emergency as quickly as possible. 911 emergency services can be contacted directly; however, they may not be familiar with the building names on campus as they only have a list of building numbers on record.

'88' can also be called in the case of a minor emergency which may not merit calling an ambulance. In this case, campus security will either assist with the emergency directly or dispatch the Emergency First Response Team (EFRT) - a group of medical students trained to deal with medical emergencies on campus. All of these services are available at all times.

## Harassment and Discrimination

The university takes the safety and well-being of its students and employees very seriously. If TAs experience discrimination or harassment based on race, gender, sexuality, religion, etc. from other students, staff, or faculty they are encouraged to report it to the Equity and Inclusion Office on campus immediately. All reports made are dealt with in a professional and discrete manner while ensuring that the individual reporting the harassment remains anonymous to the individual(s) they are reporting.

It is important to report discrimination and harassment as soon as it happens in order to help prevent such incidents from continuing or occurring in the future. If a TA is unsure whether what they are experiencing crosses the line into an actionable offence, they should contact the Equity and Inclusion Office, who has officers who can help assess the situation.

Visit <http://equity.mcmaster.ca/> for more information.

# Grading

## What is grading aside from assessment?

Grading is the most common form of communication between the instructor and the students. Grading is primarily about assessing the students' level of knowledge and relaying that information to the students and the instructor. The capability of the students is useful insight for the instructor, who can then adjust the delivery of the course material accordingly. The student gains from the evaluation by learning what areas of the course they need to improve upon. In these ways, grading becomes more than a "ranking" of students and more of a vehicle for communication between the students and the instructor.

## Feedback

Feedback takes the form of short explanations that the TA writes on assignments and exams while grading. These notes are used to indicate where a student lost marks or to clarify a point the student did not completely understand. This feedback indicates to the student where they went wrong and helps them discover what they might have misunderstood in the material. Feedback also gives the student insight as to how their grade was calculated, while also informing them that their grade was not subjectively determined. If a student wants to challenge how their answer was graded, this feedback helps TAs quickly remember why they awarded the marks as they did. With feedback, a TA can quickly correct any mistake they made or further explain to the student how their grade was calculated.

## Consistency and Fairness

Consistency in grading can sometimes be difficult to achieve. Teaching Assistants are responsible for ensuring that every assessment is treated equally. However, this is often difficult for a variety of reasons, including:

- Having to break a grading session over multiple days, which can put the TA in different mindsets while grading.
- Having to grade for a long period of time, which can cause the TA to become tired or irritable.

To help avoid these pitfalls and maintain fair and consistent marking a TA should set aside specific time(s) for grading, and plan to take breaks when grading for extended periods of time.

TAs should treat each student equally while grading, no matter the personal biases they may have towards the student. This can be difficult as, over the course of a semester, the TA will get to know and may even form opinions about a number of students. For example, a student consistently submits sloppy work that is difficult to grade; while it can be tempting to devote less time to this student who submits poor quality work, each submission must be treated independently. TAs must not let a student's past performance influence their judgment in marking current and future work.

Grading consistently and fairly can also become difficult as schedules become busier. By the end of the semester, things start to pile up. A TA may have exams, projects, research and an increase of grading to do. TAs must be diligent and give their teaching assignment priority, focus and their full effort, regardless of whether they are busy or stressed.

## Reviewing Grades

TAs should always be open to reviewing their work. Some students are very motivated to get exceptional grades and may frequently petition a TA in the hopes of receiving even a small increase to their grade. Frequent visits by a single student arguing for additional marks can get frustrating, but TAs must treat each visit independently. The TA must assume that the student has a valid reason when asking for the grading of their work to be reviewed, no matter how often the student asks.

Students may present justifications as to why they should get leniency from the TA (e.g. 'they were sick', 'there was a bereavement in the family', etc.). Unfortunately, the TA is not at liberty to evaluate these reasons, nor provide exceptions for students. There are formal processes to deal with these scenarios and such reasons must be cleared by the instructor before a TA can act on them.

It is not uncommon for a TA to change a posted grade, the TA may have made an error inputting the grades, or they may have fixed a mistake in grading a student's assignment, etc. The TA should establish the policy of editing posted grades in their initial meeting with the instructor at the commencement of the semester. Before updating any grades, the TA should talk to the instructor and let them know of any changes they wish to make.

Many instructors will require that the TA for the course develop a grading scheme for each problem they are grading. Sometimes, after returning the work to the students, the TA can be made aware of a mistake in their grading scheme. The TA must deal with that error and make the instructor aware of the mistake. The instructor will often let the TA know how to deal with such an issue, often by either adjusting the awarded grades to all students or in some cases requiring the TA to re-grade the affected work or question.

## Grading Assignments vs. Exams

An exam worth 40% of a final grade and an assignment worth 1% are very different methods of assessment. Given the difference in assessment, consider the context of what is being graded and act accordingly. There are obvious differences between exams and assignments:

<b>Exams</b>	<b>Assignments</b>
<u>High stress, little time</u> Exams are an assessment of the student's knowledge of a large amount of material over a short amount of time.	<u>Ample time, lots of resources</u> Students have days to complete assignments with access to libraries, computers, and the internet.
<u>Messy, poorly structured answers</u> With the limited time of an exam, students may not always manage their time well. They might find they have to rush to complete questions and cannot devote much effort to how neat or organised their answer is.	<u>Neat and professional</u> It is fair to expect that the assignments students hand in are laid out in a neat and professional manner, as they have the time to review and rewrite them. If necessary, TAs can assign marks to presentation and legibility for assignments.
<u>Calculation errors</u> Simple calculation errors may not be caught by students who are focused more on the method of	<u>Reviewed calculations</u> While the method used to answer the question should be what the grading TA is marking, it is not unfair to



answering questions. With the limited time of an exam, students may not be able to review their answer to correct calculation errors.	award significant marks for the correct final answer.
<u>Worth more</u>	<u>Worth less</u>
Exams are worth more to a student's overall grade. As they are worth more, a TA should spend more time marking them, taking the time to decipher messy writing and tracking calculation errors through to the answer.	As assignments are not worth as much as exams, TAs should spend relatively less time marking them. It is not unreasonable to assume TAs will not follow through every calculation when marking assignments, however, they should identify areas where students went wrong.

The TA should understand the differences between grading exams and assignments and grade them within the given context. TAs should spend more time grading exams and doing their best to assign the mark the student deserves. With assignments, it is not unfair to expect the students to have presented the material in such a manner that is easy to follow and does not require as much time to decipher.

## Grading Philosophies

A grading philosophy is a term that describes a hierarchy of values regarding the weighting of grades towards various aspects of a student's work. Some common examples of grading philosophies include:

- **The solution method is the most important part of an answer**

*This is a very common philosophy used in science-based subjects where there is a set methodology to the solution that must be followed. This grading philosophy awards the most marks for the steps taken towards the solution.*

- **That a neat, well presented, answer is what deserves marks**

*If a solution is not easy to read or isn't well structured, then it does not deserve a good grade. This is not the most common grading philosophy encountered in engineering. However, it is quite relevant to projects and reports where presenting information cogently and professionally is important.*

- **The final result is the most significant part of a solution, given that in industry results matter**

*This grading philosophy heavily weights the marks awarded to the final result of the answer. This style of grading philosophy is sometimes used when the student has to display some engineering judgement dependent upon the result of their calculations.*

Everyone has an idea of what is the most important aspect of a solution and thus everyone has their own grading philosophy. For most courses, the grading philosophy will be established by the instructor, and the TA should strive to emulate it. It is important that TAs talk to instructors at the beginning of a teaching assignment to gain an understanding of the grading philosophy to be followed. The grading philosophy established by the instructor should be what dictates how an answer is graded, or how a grading scheme is to be developed.

## Developing Grading Schemes

Some instructors provide TAs with very thorough grading schemes to the problems they are to mark. However, most instructors expect the TA to develop grading schemes for the problems they will be grading. While there is no substitute for practice when it comes to developing grading schemes, there are some basic steps that can be followed.

Before developing a grading scheme, the grading TA should read through a few answers without awarding marks. This first pass is to inform the TA as to how the students approached the question. From this, the TA should see how the students are solving the problem and what the crucial or difficult steps are. With knowledge of how the students solved the question, the TA should then develop a grading scheme that distributes marks between those steps appropriately.

The marks should be divided so that a correct solution and understanding of the material is rewarded while also reflecting the grading philosophy of the instructor. Before making any grading scheme, it is extremely beneficial to establish what the instructor finds important in a solution. If possible, obtaining sample questions or marked answers from previous years can apprise a TA of what the instructor regards as most important.

While marking, if a student takes an approach which is not covered by the marking scheme, such as a different, but valid solution method, the TA should deal with it as best as possible within the framework of their grading scheme. However, it may be necessary to create a separate grading scheme for solutions that deviate substantially from those already encountered. A note should be made as to how the grading was calculated to maintain consistency, should it be encountered in the future.

## Grading Schemes and Rubrics

The vast majority of TAs in engineering are grading exams and assignments that are arithmetic in nature, and deal with the manipulation of formulas and numbers. Marking such work is often conducted using well-defined grading schemes that are similarly formulaic in nature. However, other assessments such as reports, projects, and presentations are difficult to evaluate using a rigid and formulaic grading scheme. Rubrics are very useful when grading such assessments, as they can be tailored to assign grades to ideas and concepts rather than numbers and specific steps. They are created by categorising answers and defining what meets the criteria of an acceptable answer. Rubrics can be loosely defined or quite rigid in how they assess concepts depending on the requirements.

# Teaching

## Basic Tutorial Info

In many cases, the TA will take on a teaching role leading a tutorial or laboratory experiment, while the instructor will run the lectures. As such, it is important to remember the purpose of the tutorial/lab within the context of how the course is structured. In most cases tutorials and labs are used to reinforce content presented in lectures - not to introduce new content. Where lectures may have hundreds of students per class, tutorials are usually closer to 30 students per class; this allows students to ask questions they may not have the opportunity to ask during a lecture. It is important to take advantage of this smaller class size by focusing on facilitating a discussion with the class rather than lecturing for long periods of time. This can be achieved by encouraging students to participate and by challenging the students to think critically. This interaction with the students allows the TA to assess the student's level of knowledge.

Some possible roles the TA may perform during a tutorial or lab include, but are not limited to:

- **Introducing and/or reinforcing course content:** The TA may be asked to revisit some material that was presented in previous lectures.
- **Leading/demonstrating experiments:** Most departments have lab courses to demonstrate concepts presented in class. The TA may be responsible for leading/demonstrating such labs while encouraging students to relate their findings to the course material.
- **Reviewing assignment/homework questions:** One of the most common roles of a TA in a tutorial is to walk the students through the solution procedure to sample problems. This provides an excellent opportunity for the students to get immediate feedback on sample problems. Some instructors encourage the students to solve the problems themselves during a tutorial, while the TA is there to assist if they get stuck.

## Preparing the First Tutorial

Prior to the first tutorial/lab, the TA should consider some of the following questions and discuss them with the course instructor:

- **What role does this tutorial/lab play in the course structure?**  
*The TA should understand the intended purpose of the tutorial in the context of how the instructor wishes to run the course.*
- **What are the course goals/objectives?**  
*It is important to remember that each tutorial should have a specific objective which should reflect and work towards the overall objective of the entire course.*
- **How do I get audiovisual equipment if I need to use it?**  
*Often the instructor will have this information; however, each building has a central office which houses keys/passes/passcodes that the TA may need. (E.g. JHE has The Hub located in JHE-216A)*

During the first week of school, the students are introduced to a number of different courses, instructors, and TAs. As a result, a very useful tool for the first tutorial/lab is to prepare a tutorial handout that includes: well-defined expectations of the students, office hours & location, contact information, and the email policy, among other things.

## Learning Environment

It is important for the TA to set the tone for the classroom. This involves being courteous and professional with the students, as their behaviour will often reflect that of the TA's. It is essential to make sure that the classroom is a safe and inclusive environment where all students feel comfortable contributing their ideas, views, and concerns. While some TAs may wish to be more relaxed and casual with their students, it is important that this behaviour does not prevent the TA from establishing a positive learning environment. As the leader of the classroom, the TA should respond quickly and explicitly to disruptive behaviour to ensure that all students are respectful of everyone's opinions. The TA should always be honest with the students. If they are unsure of the answer to a question it is always appropriate to say, "That is a great question, I am not sure at the moment, let me look into it and get back to you." Students are very appreciative of the honesty of the TA as it helps facilitate a civil and inclusive environment where not knowing an answer to a question is okay.

## Keeping Students Engaged/ Focused

When speaking in front of a classroom it is important for the TA to speak clearly and maintain eye contact with the students. They should avoid turning their back to the classroom for long periods of time as this hinders two-way conversation between the TA and the students.

It has been shown that a student's attention span is limited to 15-20 minutes, after which the student may lose focus on the tutorial/lab. Therefore, it is a good practice to 'switch gears' every 15-20 minutes and avoid lecturing or performing an activity for any longer than this length of time. For example, a TA could break up a class discussion with a think-pair-share activity, where students brainstorm ideas on a topic over a short period of time, then get into groups to share their ideas, and finally share their ideas with the class as a whole. This alters the format of the conversation and helps to keep students engaged with the material.

When engaging students, it is important to ask questions that will ultimately encourage class participation. There are two key types of questions which a TA can use: open-ended and closed-ended questions. Open-ended questions are those that encourage students to elaborate on their answer in more than a simple one-word response and often require the students to explain their thought process. Closed-ended questions only require a simple and direct answer. For example, "how did you arrive at a solution to this problem?" is an open-ended question, while "what answer did you get for this problem?" is a closed-ended one. Open-ended questions should be used most often since they facilitate two-way dialogue and encourage students to participate and share their ideas. However, closed-ended questions are very effective at getting the classes' attention, as you can pose one to the class in the form of a survey question (e.g. "how many of you got "x" as the answer?").

## Lesson Plans

Being prepared prior to each tutorial/lab is important in order to be an effective TA. One way to be prepared is to develop a lesson plan for each tutorial/lab. A lesson plan is an outline of the material which is to be covered and the activities which will be used to convey that material. A lesson plan should contain point form notes and be a summary, not a script. Lesson plans should also include the length of time that will be devoted to each activity, and should be used as a rough guideline so that the TA can deliver the tutorial on time at an appropriate pace. With a lesson plan, the material can easily be presented in a logical and easy to understand manner. The BOPPPS model is a well-established framework for developing a lesson plan. This model is divided into the following sections: **Bridge, Outcomes, Pre-assessment, Participatory Activities, Post-Assessment and Summary.**

The following is an outline for each section:

### **Bridge**

- Gain the class's attention at the start of the tutorial/lab
  - This gives students time to get settled
- Gain student's interest
  - Through personal anecdotes, historical events, thought-provoking dilemmas, real-world examples, short video clips, practical applications, or probing questions

### **Outcomes**

- Introduce the purpose/objective of the tutorial/lab
  - This should be one sentence
- Depicts what students will know/be able to do by the end of the tutorial/lab

### **Pre-Assessment**

- Review previous tutorial/lab content or content presented in class
- Limit to important equations and concepts
- Great opportunity to ask open-ended questions to get the class engaged
- Helps the TA understand the students' current level of understanding

### **Participatory Activities**

- Keep your original objective in mind
- Check for understanding
  - Ask questions throughout and try not to continuously talk

**Tip:** make note of questions and comments on the solution(s) you are using in the participatory activity to pose to students as you are reading through the solution(s) during the tutorial

### **Post-Assessment**

- Provide opportunity for questions from the students
- Assess the student's knowledge
  - Use open-ended questions

### **Summary**

- Conclusion to lesson
- Review and reflect on material covered

## Self-Assessment

As soon as convenient after the tutorial, while it is still fresh in the TA's mind, the TA should review the tutorial/lab and ask themselves some reflective questions that help them assess how it went and what can be improved.

The purpose of the self-assessment is to continuously improve the delivery of material, and in doing so, become a better TA.

Possible self-assessment questions include:

- What went well? Why?
- What needs work? How can I improve on it?
- What should I review/reiterate at the start of the next lesson?

# Student Scenarios

## Non-Participating Student

*As a TA for the Failure of Materials tutorial you are asked to work through various case studies of different famous mechanical failures with the students. The tutorials consist of discussions around the evidence provided to forensic engineers wherein the students are tasked with debating who is at fault for the failure. Over the course of the first month you notice that there is one student in your tutorial who does not contribute to the conversation. The student follows the discussions in the classroom, but does not volunteer any opinion on the material. Their lack of participation makes it difficult for you to assess their level of knowledge.*

*How do you deal with a Non-Participating Student?*

### Why are they not participating?

There are many reasons why students may not participate in class. The first step in encouraging participation is to identify the reason why a student may not be taking part. The student may:

- not have had an opportunity to read the assigned material
- be unclear about what the tutorial objective is
- be intimidated by speaking in front of other students
- be distracted by events outside the classroom

### How can a TA encourage students to take part in the class?

A TA should not try to force a student to participate in a tutorial or lab. The job of the TA is to create an inclusive classroom where everyone is free to participate.

However, there are some small things TAs can do to encourage students to participate:

- **A show of hands**  
*Posing a question to the class, by a show of hands, to see who believes the answer is one of two or more options is an excellent and subtle way to get students to participate in the classroom. TAs can further extend the conversation by asking if someone is comfortable explaining why they voted for their answer.*
- **Group work**  
*If a student is uncomfortable in front of a full-sized classroom, they may be more comfortable participating in front of a smaller group. Having students work in small groups may help that student to gain confidence participating in discussions, which will hopefully translate to their participation in full class discussions.*

## The Dominant Student

*There is one student in your Network Analysis tutorial who is very eager to participate. They make an effort to volunteer the answer to any question before another student can. If other students are asked to explain a concept being covered, the student often interrupts, believing the other student isn't answering the question completely. Inevitably they end up taking over the explanation or discussion. If there is a class discussion, this student seems to be the most vocal, often overwhelming others in the larger conversation.*

*How do you deal with a Dominant Student?*

- **Call on other students directly/indirectly**

*If a student is consistently volunteering the answer to a question before other students have a chance, the TA can direct their questions to other students or other groups that do not include the dominant student.*

*For example:*

*"Nazanin, can you tell us why....?"*

*"Can anyone in the back explain where...?"*

*"Will someone we haven't heard from today tell us how...?"*

- **If the student continues to dominate the participation in the class, it may be necessary to ask to speak privately with them following the tutorial/lab**

*Most often a dominant student does not see what they are doing as an issue. Often, they are just extremely eager to participate and excited to learn. Let the student know that while their contributions to the class are appreciated, their actions are affecting other students' ability to contribute in the class. Ask the student if, now that they are aware of the effects of their actions, they will work towards allowing other students to participate to the best of their ability.*



## The Disruptive Student

*The numerical methods tutorial you are assigned mostly consists of solving problems, so that students become familiar with solution methods for the course. However, you find that the classroom is often disrupted by one student. This student can usually be found at the back of the classroom reading the newspaper or laughing at YouTube videos on their phone. They frequently try to involve nearby students in a conversation about an article or video. When this student does participate, they are often contentious towards the material and the method you are proposing. They challenge the class as a whole claiming that it is a pointless exercise in “academia” with no practical application.*

*How do you deal with a Disruptive Student?*

- **Ask the student if they have a question**  
*Asking the disruptive student a question is a quick method of letting them know that their lack of engagement has been noticed. The interruption may cause the student to put away whatever is distracting them. Any conversations unrelated to the tutorial/lab should stop. However, if it is a legitimate conversation about the material, this will give the TA the opportunity to provide an answer and cut the side conversation short.*
- **Do not tolerate disruptive behaviour**  
*Disruptions to the classroom will make it more difficult for other students to focus and absorb the material being presented. If there is disruptive behaviour in the classroom, it is the TA’s job to stop it, so that all of the students can learn.*
- **Talk to the student after the class or during office hours**  
*If the student is adamant in their disruptive behaviour, the TA should address it directly. Inform the student of the effects of their behaviour on the classroom environment. Tell the student that they cannot continue to be a source of disruption in the classroom and that if they are unwilling to stop that they will be asked to leave.*
- **Get the student to leave**  
*If the student is extremely disruptive to the class, is affecting the TA’s ability to teach, and is unwilling to stop, the TA can ask the student to leave the classroom. If they refuse to leave, the TA should call security (‘88’) to have the student removed. This is an extreme scenario, but the TA should know that this is an acceptable option available to them.*

## The Dependent Student

*You are the TA for a second-year math course. Your TA assignment for this class is leading a tutorial and maintaining office hours every week. The TA assignment is going well and the class seems to be doing well aside from one student. This student often lingers after the tutorial to ask many questions, sometimes lasting 25 minutes after the tutorial. This student also frequently comes to your office hours spending much of the allotted time asking you further questions. The questions they ask are not limited to the tutorial, branching into other areas of the course, or assignments and other questions that could be considered relatively basic for someone taking this course. They regularly come to the office with their partially completed assignment looking for confirmation that their answers are correct and for the solution if they are not.*

*How do you deal with a Dependent Student?*

- **The student may be missing a prerequisite for the course**  
*Without the background material, the student would struggle with the advanced material. Let the student know that there are options available to them such as the ability to delay the subject for a term so that they can take the prerequisite.*
- **Encourage the student to take responsibility**  
*Offer the student supplementary resources to the core course material that they can pursue on their own time (e.g. books in the library, online course material, YouTube videos, tutor services, etc.).*
- **Set firm boundaries on the amount of time you can spend answering questions**  
*Let the student know how much time you have available to spend with them (e.g. "I only have 5 more minutes before I have to help the next student"). Let the student know that the time outside of the tutorial or office hours is not part of the TA assignment and, as such, answering their questions outside of the allotted time is not feasible.*
- **Divide your time with the students equally**  
*If other students come with questions during office hours or after the tutorial let the dependent student know that other students have to be given a comparable amount of time. Students might think that because they arrived first, their questions must be addressed before other students who arrived later, however this is not the case.*
- **Let the student know what office hours are for**  
*Office hours are for answering student's questions about the material in the course. Unfortunately, TAs cannot proofread assignments nor provide solutions to assignment problems which have not already been graded.*

## The Complaining Student

You are the TA for a Thermodynamics course where your duty is to grade the weekly assignments for the course. There is one student that comes to you after each assignment is returned with complaints about how their assignment is marked. Their complaints are frequently about minor aspects of the solution where they think their answer can be interpreted as technically correct, but you have marked it incorrect. They expend much effort each time to convince you to increase their marks, frequently citing their need to get a good grade in the class.

How do you deal with a Complaining Student?

- **Hear the student out first, then make a judgment**  
*Even though the student is frequently coming with what seem like nuisance complaints, the default assumption should always be that they have a valid concern about the assignment. Each instance should be judged on its own merit, and previous claims should not influence the assessment of their concerns.*
- **Make sure that all of the students are aware of the marking scheme**  
*If the student knows how the marks were awarded to their assignment, then they will understand why they got the grade they were given without having to ask the TA directly.*
- **Provide comments to the students on their assignment**  
*Having notes on the assignment that is returned to them will help students understand why they lost marks. These students will be less likely to come to the TA to argue the point as they have already been provided with an explanation as to why they lost marks.*
- **Inform the student that if their work is remarked their grade may increase or decrease**  
*Students tend only to pick apart why they lost marks, but they haven't looked to ensure that they did the other parts of the assignment correctly. Let the student know that taking a closer look might reveal some other mistakes that were made on the assignment, thus resulting in a lower grade after remarking.*
- **Don't re-grade on the spot**  
*If the student is adamant that their assignment should be re-graded, then re-grade it over the next day or two before returning it to them, as opposed to re-grading on the spot.*

# Additional Resources

## Campus Resources

Some additional resources that may be useful for a TA include:

- **Student Wellness Center** (x27700)
  - If a student seems ill or is in emotional distress.
- **Campus Security** (x24281 or 88 on any campus phone) or 905-522-4135 from a cell phone
  - In the case of an emergency on campus.
- **Off campus emergency** (dial 911)
- **Equity and Inclusion Office** (x27581)
  - If you are experiencing harassment or discrimination at any level of the university.
- **MacPherson Institute** (x24540)
  - More teaching and learning resources are available at <http://mi.mcmaster.ca/>
- **Environmental and Occupational Health Support Services** (x24352)
  - For any questions regarding health and safety in the classroom.
  - For any training required by a department.
  - More information is available at: [www.workingatmcmaster.ca/eohss](http://www.workingatmcmaster.ca/eohss)