

# **Duke Statistical Science TA Manual**

2/28/23

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# 1 Introduction

As a Teaching Assistant, whatever your duties, you are part of the Statistical Science Instruction Team. This Spring, we are offering over 1900 seats in courses taught by departmental faculty to students from across the globe. Students will range from 450 undergraduates enrolled in their first 100-level course to doctoral students nearing the end of their formal coursework. We want students who take only one or two courses from the department to learn the usefulness, importance, and power of statistical thinking and modern methodologies. We aim to educate our undergraduate majors, minors and interdisciplinary majors, master's students, and Ph.D. students in particular to be highly accomplished future leaders in statistical science, regardless of their career paths. For all of these students, whatever their programs, we aim to provide a transformative educational experience in statistical and data science. By joining our instructional team, you help us to deliver a meaningful learning experience to each of our students.

## The Fundamental Rule for TAs is...

**Always talk with your instructor if you have questions, concerns or suggestions.** Talk with the other TAs. Talk with the DUS, the Undergraduate Coordinator, and the departmental staff. Ask for help if you need it, ask your questions, and keep asking. Let us know what you need in order to do your job and to do it well. We're glad you are here and willing to help out. Thank you!

## 2 Useful links

- Duke COVID updates and policies: <https://coronavirus.duke.edu>
- Spring 2023 Academic Calendar: <https://registrar.duke.edu/spring-2023-academic-calendar>
- Final Exam Schedule: <https://registrar.duke.edu/calendars-key-dates/exam-schedules>
- Spring 2023 Office hours: <https://duke.is/nbm49>
- Questions or concerns: [dus@stat.duke.edu](mailto:dus@stat.duke.edu)

## 3 COVID-19

This semester classes will be held in-person from the beginning of the semester. If at any point classes are moved online, office hours will also be moved online.

### 3.1 What if you get sick?

If you become ill or have an emergency and are unable to perform your assigned duties, please see to your own immediate needs (<https://studentaffairs.duke.edu/studenthealth>). Then let the instructor know as soon as you can and also let Dr. Durso know. If you are a graduate student, please also let Lori Rauch know in the StatSci Department by emailing her at [lori.rauch@duke.edu](mailto:lori.rauch@duke.edu). Follow the guidelines found at <https://coronavirus.duke.edu>.

### 3.2 What if someone else gets sick?

What if the instructor stops showing up? Contact the DUS right away.

What if another TA stops showing up? Contact the instructor right away.

What if a student stops showing up? Tell the instructor and the DUS.

## 4 Responsibilities

TA responsibilities will vary between classes therefore TAs should obtain from the instructor clear guidelines for the specific tasks required of the TA. Many of these tasks are described in general terms below.

- Complete all requested training and learn the technology tools required for the course you are assisting.
- Answer all communications from the department, your instructor, other campus employers, and the university, within 24 hours, before the end of the next business day.
- Familiarize yourself with the university curriculum and policies:
  - Undergraduate courses: The undergraduate bulletin (<https://registrar.duke.edu/university-bulletins/undergraduate-instruction>) and T-Reqs (Trinity Requirements) (<https://trinity.duke.edu/undergraduate/academic-policies>) are sources for Trinity College Academic Policies and Procedures. You are encouraged to review this site for information on university policy on religious holidays, disability accommodations, class attendance, credits, exams and grading, harassment, plagiarism, etc.
  - Graduate courses: Review the Graduate Bulletin <https://registrar.duke.edu/university-bulletins/graduate-school> and the Graduate School's policy site <https://gradschool.duke.edu/academics/academic-policies>.
- Get in touch with the instructor before the first class and be available to meet with the instructor during the first week of class.
- Office hours:
  - Office hours can be in person or remote. We are asking that all courses set up at least some Zoom office hours to accommodate students who are ill or in isolation or stuck traveling. Check with your course instructor for ideal distribution of Zoom / in person office hours.
  - In general, we request that TAs working 8-15 hours per week hold two hours of office hours each week and those working less hold one hour. Your instructor may have different requirements.
  - Your primary duty during the office hours is to help students from your course.

- Lectures: Attend the first live or online class session (if possible and if requested to do so) and discuss with the instructor whether continued attendance is required. For TAs new to a course or the TA experience, attendance throughout the semester is often expected. Ask your instructor about their policy.
- Labs:
  - Provide your availability to your course instructor for leading / helping out with labs as soon as possible after your TA assignment.
  - Prepare for lab sessions by reviewing the lab assignment – this includes running through the assignment, actually running the code and providing feedback to the instructor if anything is incorrect/not clear.
  - Meet with your instructor and make sure you understand what is expected of you for that role in that course.
- If you are assigned the duties of a Head TA, see **?@sec-head-ta**.
- Attend regular meetings with the instructor, typically at least once a week.
- Respond to students' e-mails, forwarding common questions to the instructor and other TAs (if any). Your instructor will set expectations about the format students will use to answer questions. If the instructor is using Ed Discussions or another tool for Q&A, discuss with the instructor expectations about answers and about how to handle getting students to ask their questions in that tool rather than in emails. You may be asked to cover answering questions on particular days.
- Monitoring performance / keeping pulse of students' learning:
  - Assist in assessing and reporting student performance to the instructor. This includes identifying top and/or struggling students and identifying problems or concepts causing difficulty for students. **YOUR FEEDBACK IS CRUCIAL TO US!**
  - Let the instructor and then the Director of Undergraduate Studies and the Undergraduate Coordinator know if you think a particular student needs support.
- Your other duties and responsibilities might include but are not limited to:
  - Grade labs, homework assignments, exams, etc. using Gradescope and other tools.
  - If the course has a lab component, review to prepare and then run labs or assist in labs.
  - Conduct review sessions prior to exams, if the instructor requests.
  - Help maintain the course website or Sakai site.
  - Work with student teams on their group projects.
  - Improve your teaching skills by training, practice, observations and feedback.
- Stay available for course related duties until the end of the final exam week.



- **Spring 2023 final exams end at 10 pm on Saturday, May 6 .** Grades are due within 48 hours of the end of the exam period. This means TAs are expected to continue to hold office hours during their respective final exam periods, and to be available for grading final exams in their assigned courses unless they make special arrangements with the course instructor. Please discuss the end of semester plans with the instructor you are assisting right away.
- If you miss a scheduled meeting, training, office hours or other event, immediately contact the instructor.
- Timekeeping:
  - Keep accurate track of time spent on the course and report to the instructor if your hours are above or below the expected level.
  - If you are paid biweekly, update and save your time card when you finish work for the day and submit promptly before the deadline. If you do not turn in your time card you will not get paid for the hours you worked.
- **Always complete the course and TA evaluations in the courses for which you are enrolled as a student.**

## 5 Best practices

- **Technology:** During training, you will be asked about your ability to use Gradescope for grading and Zoom and whiteboarding for online meetings. It's fine to use a do-it-yourself hack to turn your cell phone into a document camera aimed at paper or a whiteboard. If needed for a particular course or online office hours, let us know if you lack a tablet and stylus or something to use for written explanations; it is possible to acquire an inexpensive drawing device if you need one for whiteboarding.
- **Books:** Many courses now have electronic versions of the text available for free online or through the Duke Libraries. Please check with your instructor first. For some courses, the Assistant to the DUS Mrs. Karen Whitesell (karen.whitesell@duke.edu) has physical desk copies of most books that you may use for TAing the course, but you must return the book at the end of the semester. Please contact her if you need a textbook copy for the course.
- **Course website:** Familiarize yourself with the website for the course. This may be a site designed by the instructor or it may be a Sakai site. Sakai is a university wide course development and presentation platform; all courses use Sakai at least for grades. You will need a NetID to access Sakai at <http://sakai.duke.edu>. It allows faculty (and TAs if the faculty gives permission) to post course information such as lecture notes, assignments, announcements, exam solutions, and other teaching materials to which you want your students to have access. It also will also allow you to send emails to individuals or groups, host online discussions, collect homework assignments, and allow students to view their grades. For an overview of capabilities and various tutorials go to <http://support.sakai.duke.edu/sakai-basics>. Your TA training may include Sakai training as well. If you have problems with Sakai, let your instructor know. Note that undergraduate TAs are not supposed to have access to the full gradebook in Sakai; however, you may be able to do anonymous grading. Sakai is also able to organize Zoom meetings for the course lectures, labs, and office hours. Check with your instructor or Dr. Durso. Learning Innovation also offers training on Sakai.
- **Discussion tools:** Piazza is no longer supported by Duke University but individual instructors may still choose to use it. Alternative discussion tools include Conversations in Sakai, and other tools your instructors may choose. Once your instructor has chosen which tool they will use, ask for training on that tool.
- **Gradescope:** Gradescope is an online grading tool that is usually integrated with Sakai. Gradescope is used extensively in the department and all TAs will be trained on its use.

If your instructor is using it, they will explain what they expect. If you have never used it, be sure to ask any questions you have so that you fully understand how to grade in Gradescope. You will access Gradescope using your NetID similarly to accessing Sakai. If you have previously used Gradescope for grading and think it would assist in your course duties this semester, discuss this with your instructor. If you or the instructor would like help with Gradescope, ask Joan Combs Durso, the Coordinator of Undergraduate Training, Research, and Development. We have a training site set up and TAs will provide sample documents for grading training. The workflow for syncing grades from Gradescope to Sakai has changed this semester. Training will be offered if needed.

- **Copies:** If your instructor asks you to make physical copies for the course, please contact Mrs. Whitesell and cc: Dr. Durso on the email. We'll get you access and instructions.
- **Supplies:** Please let your instructor know if you have any unmet supply needs such as chalk, dry-erase markers, red pens, etc. These are only for instructional and grading purposes, not for your personal use. If these items are missing in a TA office hours space, please let Mrs. Whitesell and Dr. Durso know.
- **Computing labs:** Most introductory undergraduate labs in StatSci are bring-your-own-device labs. Large introductory classes often use OIT provided Docker containers for computing. Graduate courses often use department servers. In remote teaching, the situation is complicated by distance and the need to see the screen of your students. Graduate Teaching Assistants and experienced undergraduates usually supervise the computing lab sections. Get help with the computing environment from Dr. Durso or from Learning Innovation's online training options.
- **Collaboration tools:** Whether your instructor is using email, Slack, Basecamp, Microsoft Teams, or any other collaboration tool, make sure you understand how to use it and what your instructor's preferred communication methods are.

## 5.1 Professionalism

- Whether you are attending class with the instructor, leading a lab, or holding office hours online, please recall that you are a leader of students and representing the department. Students may show up to online sessions in pajamas, wrapped in blankets, and attending their session from their beds, but the TA shouldn't. If students show up inappropriately dressed, please discuss the issue with the instructor.
- Use an appropriate virtual background if needed and if your computer can handle it. Try to be in a boring environment, not in a distracting one. A bookcase or office space, a living room or even a yard are fine backgrounds. Be sure to have adequate lighting. Sometimes it is just a matter of turning to face a different direction. No need to buy a ring light, but there are many YouTube videos that show you how to set up a good environment for leading an online session.

- For online sessions, if your environment is noisy, use a headset and mute yourself when you are not speaking. Practice in advance where you know you will be, so you can have someone listen to you and make sure the sound is adequate.
- If you need help with this, please contact Dr. Durso.

## 5.2 Labs

- Meet with the course instructor before courses begin and at least once a week during the semester to learn how the instructor would like the lab session run and to discuss upcoming labs and any issues that arise during the semester. First year graduate students have usually not learned about statistics from the same perspective as our undergrad courses, and some have never used the software that they will be teaching. Don't hesitate to ask questions. Undergraduates may have taken the course from a different instructor whose approach is different. Talk to the instructor of this course!
- During the first day of lab, do what you can to set the climate of the course and develop a rapport with the class. Get students to interact with you and their classmates either through introductions, small group discussion, or asking questions. Give information about yourself that helps establish that you are both credible and approachable. You will want students to leave after the first class knowing why the lab sections are important and what your expectations will be. You will want to leave after the first class knowing the students' expectations and knowing that they are engaged enough to begin expending the time and energy needed to do well in the course.
- Make sure you have worked through the lab ahead of time leaving plenty of time to ask the instructor for clarification. Make sure you understand the general learning objectives. Be ready to explain to students why they are being asked to do the exercise.
- During lab, engage the students. Encourage them to explore and play rather than simply go through the motions. Ask them questions. Be receptive to their questions. Help them make the link between the computing lab and what has been covered in the text and lectures.
- Check in with breakout groups online, even when it looks like there are no questions. Wander around the live classroom or lab. Students are more likely to reach out and ask a question if you're physically (or virtually) closer to them than if you're sitting in front of the classroom. Don't ask the Ferris Bueller query "Any questions?" Instead, "what questions do you have for me?" or "I'll take 3 questions now" are both better ways to solicit inquiry.
- Please avoid "*didactic dictation*". One of the most frustrating experiences for a new user of R is to have code quickly and sometimes inaudibly dictated to them by an experienced coder who talks too fast while typing in unreadably tiny font on a screen half the class

can't see, and allows no time for correction, troubleshooting, or questions. Live coding, where you are demonstrating something as you talk about it, and students code along, should be done slowly. You don't have to be perfect. It's okay to make mistakes and correct them, modeling authentic coding for your students. Demonstrate first, and then have students work on their own code. Watch for frustration. Address it positively.

Excellent suggestions for how to do this well can be found [here](#).

- If you have suggestions for improving the lab materials or find errors in the lab instructions, please discuss them with your instructor.
- It may be a hardship for some students to have to use their cameras during an online lab session, but make sure to set expectations. You can't see how they are doing if their cameras off the whole session. Try at least starting with cameras on for a check-in. Talk with the instructor about setting expectations. Use activities to keep students engaged even if their cameras are not able to be used.

## 5.3 Office Hours

- Many instructors will set up Zoom office hours rooms in Sakai. Practices may differ between instructors but it is a good idea to set up a Google sheet that stays linked in Sakai that can be used for students to indicate their question or need. This will help you manage the crowd that could show up. You will find an example of this in the TA training site in Sakai.
- Make sure you have read the text and class notes. Use the same notation, definitions, and perspectives as the author of the text and the instructor of the class.
- Make sure to convey your interest in helping students. Sitting in the help room (or on Zoom) doing your own homework and not making eye contact with an entering student will often convey to the student that you are not interested in helping.
- Avoid solving homework problems for students. Giving students the answer does not help them develop the problem-solving skills that will be necessary for them to do well in the course. Ask guiding, probing questions, but get the student to do the thinking. Offer similar problems as examples to work through, together.
- Students differ in their mathematical preparation, and for our undergraduate courses, students will often be very rusty on algebra or calculus, depending on the course. Be sure to work from the level of the student. If a student is in trouble beyond your abilities, refer them to the instructor.
- Make sure to speak clearly, slowly, and audibly, whether in person or online. Do not assume that your students knows a particular theorem or distribution if it has not yet

been used in the course. Speak respectfully and let them know the course is meant to be challenging but success happens with practice and spending sufficient time on the work.

- When you don't know how to work to the answer, do NOT fake it. Be honest, and seek another TA or the instructor. Giving a student incorrect information will snowball into a larger problem. If you promise to get back to them, write it down and follow it up. Share with your peer TAs or ask in a discussion forum in the TA training site.
- Let the instructor know if you have students who are struggling with the material or who don't know where to begin. It's hard for anyone to ask for help if they are not used to needing it. Be kind and patient with students who show up feeling panicked or anxious. Reach out to Duke Reach if you suspect they need help, and let the instructor know. But mostly, be kind. You were a beginner once, and the student genuinely may be lost or have not learned how to study in an online course. Help them, and get help with this if it's a problem. Kindness and patience are the best compliments in TA evaluations.

## 5.4 Grading

- Set grading policies for partial credit, late papers, etc. with the instructor. Make sure these policies are easily accessible by students (e.g., on Sakai). Make sure you understand the instructor's expectations.
- Find out from the instructor whether they expect you to make the solution key or grading rubric, including both answers and a breakdown of how points will be distributed. Ask the instructor to review before it goes live.
- Before you begin to grade, go through solutions and double check answers, points, etc.
- Grade by question, i.e., grade all of question 1, then all of question 2, etc. This will facilitate greater consistency. You may be assigned only one or a few questions from an entire assignment, especially if you are using Gradescope.
- If you are sharing grading duties, make sure to calibrate for consistency. Students will be frustrated and angry if graders differ in their process of assigning points (and you will hear about it!).
- Record grades as per instructions of the instructor, but always double check your work.
- Check with the instructor on how to enter missing grades, i.e. with a blank or a zero. Blanks can play havoc with scoring algorithms that require replacing minimums. This also depends on whether you are grading with Gradescope or Sakai.
- Grading turnaround deadlines will be set by the instructor. Be sure you understand their expectations and that you communicate your time availability. Gradescope shows what you have already graded and haven't.

## 6 Resources

Familiarize yourself with resources available to your students for learning as well as mental health and wellness. And note that as students these resources may be available to you as well (some of them are undergraduate specific, some are open to all).

**The Academic Resource Center:** (919) 684-5917, [theARC@duke.edu](mailto:theARC@duke.edu), or [arc.duke.edu](http://arc.duke.edu).

### 6.1 Mental health and wellness

Our students can be under a lot of stress. Any lab absences, missed deadlines, or concerning behavior should be brought to your instructor's attention. In addition, familiarize yourself with mental health and wellness resources:

- **The Academic Resource Center:** (919) 684-5917, [theARC@duke.edu](mailto:theARC@duke.edu), or [arc.duke.edu](http://arc.duke.edu).
- **DuWell:** (919) 681-8421, provides Moments of Mindfulness (stress management and resilience building) and meditation programming to assist students in developing a daily emotional well-being practice. To see schedules for programs please see <https://studentaffairs.duke.edu/duwell>. All are welcome and no experience necessary.
- **DukeReach:** Provides comprehensive outreach services to identify and support students in managing all aspects of well-being. If you have concerns about a student's behavior or health visit the website for resources and assistance: <http://studentaffairs.duke.edu/dukereach>.
- **Counseling and Psychological Services (CAPS):** CAPS services include individual and group counseling services, psychiatric services, and workshops. To initiate services, walk-in/call-in 9-4 M,W,Th,F and 9-6 Tuesdays. CAPS also provides referral to off-campus resources for specialized care. (919) 660-1000 or <https://students.duke.edu/wellness/caps>.
- **TimelyCare:** (formerly known as Blue Devils Care) An online platform that is a convenient, confidential, and free way for Duke students to receive 24/7 mental health support through TalkNow and scheduled counseling: <https://bluedevilscore.duke.edu>.

First year students and visiting students, in particular, may not be aware of these resources. Let the instructor know if you are concerned about a student's behavior or attendance or sudden changes in quality and timeliness of assignments. You can also let the Director of Undergraduate Studies or the Undergraduate Coordinator of your concerns. If you are holding office hours on nights or weekends, virtual campus resources may be more lightly staffed, so you should also know about other options for help.

In the event of an emergency requiring transportation, call campus police or 911.

Importantly, note that these resources are available to you as well. If you find yourself in distress, reach out to your course instructor, the DUS, or the Undergraduate Coordinator. Let us know immediately if you need help. We're here to help and always happy to talk!



## 7 Training

As a TA, you will be trained by the department and other units of the University. All TAs will complete a mandatory training session each semester. In Spring 2023, we are not requiring a technology check for Zoom-readiness but that training will be provided upon request (reach out to Dr. Durso with your request). We expect that you will get training on other technologies as they pertain to your course (Gradescope, Sakai, etc.) from your course instructor. If you feel that you have not been trained adequately on a technology you're expected to use, please reach out to your course instructor and/or Dr. Durso and we'll make sure this training happens promptly.

You will be assigned to STATSCI TA Spring 2023, the departmental training Sakai site for TAs. Training may be added as needed as the semester proceeds and we'll inform you with a Sakai announcement from there. There is required training on TA duties, on preventing harassment and on the learning technologies needed in your course.

### 7.1 First time TAs

As a new TA or new to your course and instructor, the instructor will work with you to make sure you are ready to lead your labs and hold office hours to meet their expectations. Your instructor might drop in on your labs or office hours from time to time and so might Dr. Durso. You will do training and work with them to develop your skills so that each semester that you have a TAship, you are ready for more responsibilities and leadership roles.

### 7.2 Further Training

Workshops and more training opportunities are available from Learning Innovation and the Graduate School. Upcoming workshops are here <https://learninginnovation.duke.edu/events/>.

The Graduate School has many training opportunities for students interested in teaching, see their website at <https://gradschool.duke.edu/>. Some specific opportunities that might be of interest are listed below.

### 7.2.1 Certificate in College Teaching

The [Certificate in College Teaching program](#) both prepares you to do this and formally documents this professional development to make you more competitive when applying for positions. Students who complete the CCT will have it listed on their transcripts as an officially endorsed Duke University Graduate School certificate. The CCT combines departmental training and resources with programming from The Graduate School to give you systematic pedagogical training that not only helps you develop as a teacher, but also allows you to use your time more efficiently as you balance your research and teaching responsibilities. The Certificate in College Teaching program has three major requirements:

- Coursework (2 courses, 1 offered in the Department of Statistical Science)
- Teaching experience and observation
- Online teaching portfolio

The program requirements take about a year to complete, but that may vary as opportunities for gaining teaching experience vary across departments. CCT work may be done alongside other classes, research, or work on a dissertation, and should not significantly interfere with the timely completion of any of these. After you apply to the CCT program, the program director will meet with you to go over the requirements and your timeline for completing them. Discuss your CCT activities with your instructor and the Department if you need assistance scheduling observations, etc.

Two Statistical Science courses have been developed and count towards this Certificate:

- STA 771S - Teaching Statistics
- STA 772S - Mentoring Undergraduate STEM Research

### 7.2.2 BASS Instructional Fellowships

The [Bass Instructional Fellowship Program](#) supports high-quality teaching experiences for Ph.D. students where normal means of funding are unavailable. It also helps students become more knowledgeable in online college teaching. The program offers fellowships for

- instructors of record (Bass IORs),
- instructional teaching assistants (Bass TAs), and
- online apprentices (Bass OAs).

Recipients of Bass Instructional Fellowships will receive compensatory payment at the level of Arts and Sciences teaching assistants (currently \$6,000) and a scholarship covering full or partial tuition and fees for their semester of participation. This effectively “buys out” that much of any other existing fellowship or financial support; the student will not net any additional pay. A Bass Instructional Fellowship should not lessen a student’s competitiveness for other fellowships. If the student wins another fellowship after having also won a Bass Fellowship,

that other fellowship can be decreased by the amount provided by the Bass Fellowship so that there is no penalty or disadvantage to receiving a Bass at the same time (unless this arrangement is prohibited by terms of the other fellowship).

### **7.2.3 Teaching IDEAS Series**

[Instructional Development for Excellence And Success](#) is an annual workshop series open to Duke graduate students, postdocs, faculty, and staff. Invited speakers in this series will draw upon their experience to address topics relevant to classroom teaching, dealing with students, or faculty life and career paths. You will learn how to: - recognize the complex dimensions of classroom teaching and faculty life, - analyze difficult teaching situations and respond creatively, - improve your teaching skills by drawing upon various resources at Duke, - plan and design courses with the student perspective in mind, and - engage in scholarly conversations about college teaching and learning.

### **7.2.4 Duke Learning Innovation**

[Learning Innovation](#) is not part of the Graduate School but is dedicated to improving learning at Duke. Learning Innovation provides many opportunities for professional development, including training on Sakai, Gradescope, Piazza, and other instructional tools. They also provide drop-in office hours for help with Sakai or Gradescope as well as workshops and seminars to assist you improve your careers.

## 8 Head TAs

Classes that meet either of the criteria below are strongly encouraged to have a Head TA. If you choose not to have a TA or need help identifying someone for this role, please contact the DUS.

- Each of our 100-level courses (except for Focus courses)
- Any class that has 5 or more TAs, including the Head TA

Classes that don't meet either of these criteria can still have a Head TA. In these cases we recommend instructors assign a subset of the tasks outlined below, being cognizant of the total number of hours allocated to the TA.

### 8.1 Training

All head TAs are expected to complete the following training items each semester they are serving in this role:

- Review this chapter!
- Attend a Head TA training. The training will during the first week of classes.
- Attend the Head TA check-in during weeks 3 and 6 with your instructor. The check-in will include
  - Training on giving quality feedback
  - Training on reviewing feedback from others TAs efficiently and effectively
  - Sharing experiences with course logistics, set up, and Gradescope.
  - Check in on workload
  - General Q&A
- Provide feedback through an end-of-semester reflection.

## 8.2 Responsibilities

### 8.2.1 Administrative tasks

You may be asked to do some or all of the administrative tasks throughout the semester. You can go through this list with the instructor to determine the tasks that will be part of your Head TA responsibilities.

#### 8.2.1.1 Office hours

- At the beginning of the semester, ensure each TA has scheduled their allotted number of office hours (at least 2 hours weekly) and has the necessary room reserved and/or Zoom links set up.
- Ensure office hours are well distributed throughout the week as much as is feasible to meet the needs of the students.

#### 8.2.1.2 Total TA hours

- At the beginning of the semester, obtain the number of expected hours for each TA from the instructor and when requested, compare to assigned tasks.
- Check in with other TAs about the number of hours they're putting in weekly; adjust grading assignments, as needed, to help keep their hours consistent and within their limits. If the workload cannot be allocated fairly and still keep people within their limits, notify the instructor.

#### 8.2.1.3 Gradescope

- Work with the instructor at the beginning of the semester to make sure all TAs know how to use Gradescope. Give a demonstration or facilitate a help session for TAs, as needed.
- If requested, set up assignments in Gradescope and Sakai and make the links for synchronization through the Lessons tool in Sakai.
  - Ensure grading rubrics are set up using the instructor's preferred grading convention (positive scoring, negative scoring, combination of both). Include any other rubric items requested by the instructor, such as a "needs review" rubric item.

#### 8.2.1.4 Grading

- Make grading assignments for all TAs. Each question should be graded by one TA for all submissions in a given assignment, with a rare exception if this is not feasible for particular questions.
  - The number of questions to assign to each TA will be based on total hours allowed and other TA responsibilities (e.g. labs, office hours, classroom). Total hours and responsibilities will be provided by the instructor.
- Set up a clear communication line so TAs may ask questions about grading assignments
- Make sure all TAs complete grading (both lab and lecture) within a week (or less during summer). This includes
  - Keeping track of progress and gently reminding TAs when the grading deadline is approaching.
  - Send personal reminders to TAs who have little to no grading completed the day before the deadline. Notify the instructor if any TAs regularly need these reminders.
  - If grading isn't done by the due date, send the TA a reminder. If you're unable to contact the TA or grading is still not completed within agreed upon time frame, notify the instructor immediately to follow up with TAs not finishing up their grading.
- When the grading deadline has passed, do a first pass on graded items marked "needs review" by other TAs, and notify the instructor if any questions need instructor feedback before finalizing.
- Spot check the quality of written feedback and let the TAs know if they need to improve the quality of feedback. (Note: The second Head TA training session will particularly focus on how to do this.)
- Work with the instructor to determine the process for handling regrade requests. If asked by the instructor, do a first pass on regrade requests, providing feedback on each one and notify the instructor if any others need instructor feedback before finalizing.

#### 8.2.1.5 Additional tasks

- At the end of drop/add, remind instructor to remove any students from the GitHub organization that have dropped the class.
- At the end of the semester, provide a reflection on how the Head TA role went, whether the training was effective, etc. by responding to the Head TA survey.

## 8.2.2 Pedagogical tasks

You may be asked to do some or all of the pedagogical tasks throughout the semester. You can go through this list with the instructor to determine the tasks that will be part of your Head TA responsibilities.

### 8.2.2.1 Peer evaluations

- Schedule peer evaluations in [Teammates](#) or software preferred by instructor. The instructor will provide the dates of the peer evaluation.
- When peer evaluations are due, read through the “instructor only” comments and write a one-page summary notifying the instructor how the teams are generally doing, if there are any common pain points in the class (e.g. not scheduling a time to meet), and any groups that may be having trouble. Any especially good groups are nice to mention too!

### 8.2.2.2 Review assignments & grading rubric

- Review assignment instructions and notify the instructor of anything that may be confusing or unclear.
- Review the grading rubric and notify the instructor of any errors or inconsistencies in the instructions and rubric.
  - Talk with the instructor at the beginning of the semester to establish expectations on when they will have the grading rubrics ready for review.
- Make minor updates and corrections to assignments when requested; instructors are responsible for lab creation and major updates.
- If it is not feasible to schedule a weekly meeting with all TAs and the instructor due to unavoidable scheduling conflicts, work with instructor to record TA meetings via Zoom and share meeting recordings with other TAs.

*Perhaps the most important task of the head TA is to set an example for other TAs.*

## 8.3 Role of the instructor

The following are the role and responsibilities of the instructor and should not be part of the Head TA's responsibilities.

- The instructor is responsible for course grades.
- The instructor is ultimately responsible for grading for consistency within particular items and across entire graded assignment or assessment.
- In assigning responsibilities to the Head TA, the instructor should determine who will set up assignments in Gradescope and Sakai and make the links for synchronization through the Lessons tool in Sakai.
- Making arrangements for accommodation requests from students and coordinate with the testing center if needed.
- Scheduling weekly meetings with all TAs to discuss course flow, make sure all TAs have a good handle on the topics / concepts / tools coming up in the subsequent week, etc, and to discuss ongoing grading. Unless there is a very specific reason, do not decrease this cadence.
- Managing the Sakai Gradebook. The instructor may not grant teaching assistants (including the Head TA) access to the Gradebook in Sakai unless there is a very specific reason to do so. Note that the university prohibits undergraduate TAs from having access to the Sakai Gradebook entirely.
- Check in with Head TA during Week 3 and Week 6 about workload. If there are concerns with workload, assign another TA (graduate student or advanced undergraduate) to help with some Head TA responsibilities or reach out to DUS for more resources, if needed.



## 9 Evaluation and recognition

Continuation of the opportunity to hold a Teaching Assistantship is contingent on good TA performance. Student and faculty evaluations of TAs will occur at the end of each semester via surveys. Excellent TA evaluations can also provide the basis for future recommendation letters from faculty. TAs will be able to review their evaluations at the end of each semester.

We also recommend getting feedback from your students during the semester. If your instructor does not do a midcourse survey for anonymous feedback from students and you wish to set up one for yourself, please contact Dr. Durso for help with a Qualtrics survey.

### 9.1 Recognition

The Department of Statistical Science recognizes one doctoral student, one master's student and one undergraduate student as TAs of the Year each spring during commencement festivities. Faculty members will be asked to nominate TAs for this award each semester (for TAs in Summer 2022, Fall 2022, and Spring 2023 courses) and a departmental committee will decide on the winners based on faculty and student evaluations. TAs of the Year will be recognized at the departmental graduation at the end of the academic year. These are cash awards and the amount are \$1,500 for PhD TAs, \$1,000 for MS TAs, and \$750 for undergraduate TAs.